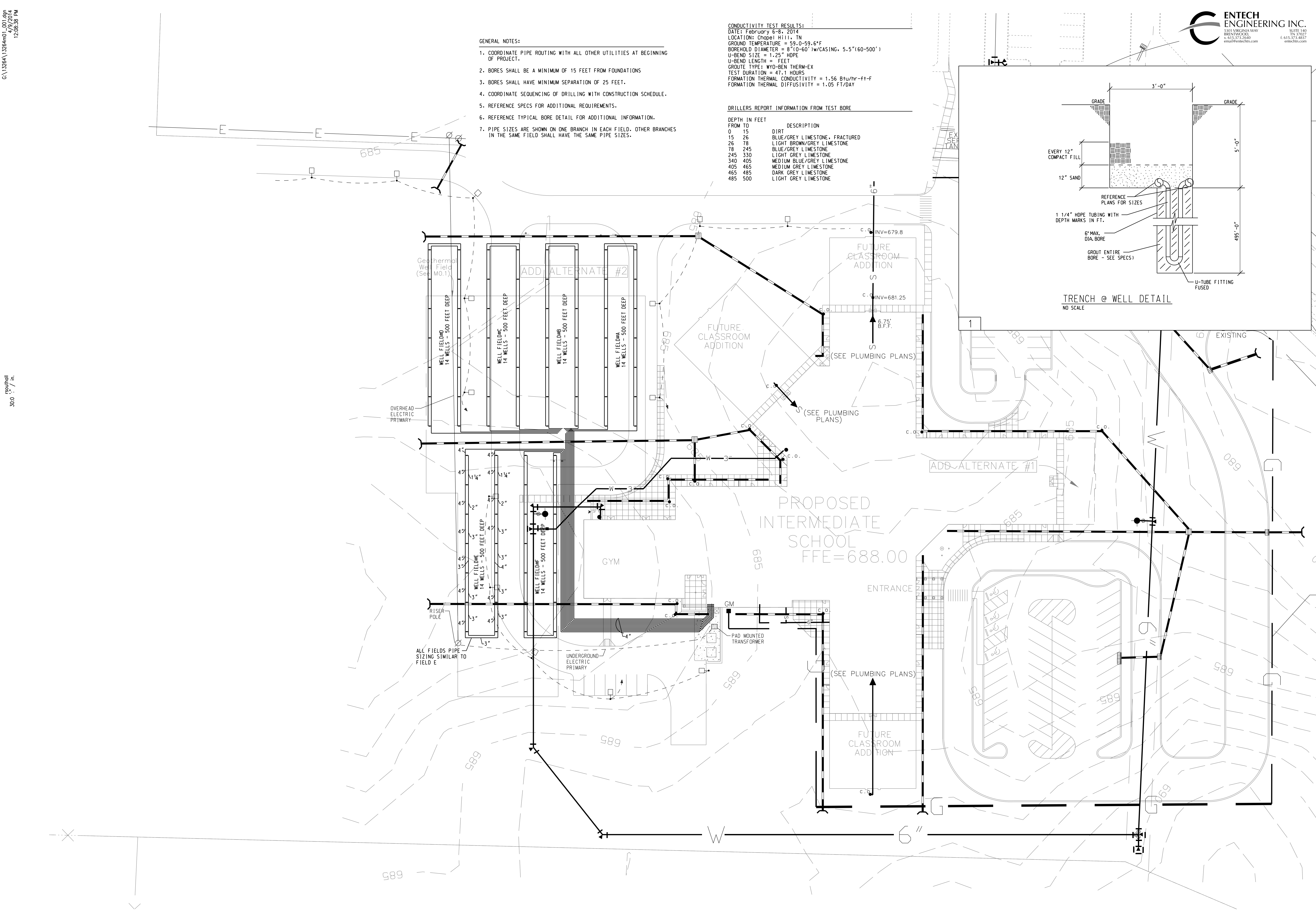


C:\13264\13264.mxd 4/9/2014 12:08:26 PM

300' = 1" / n.

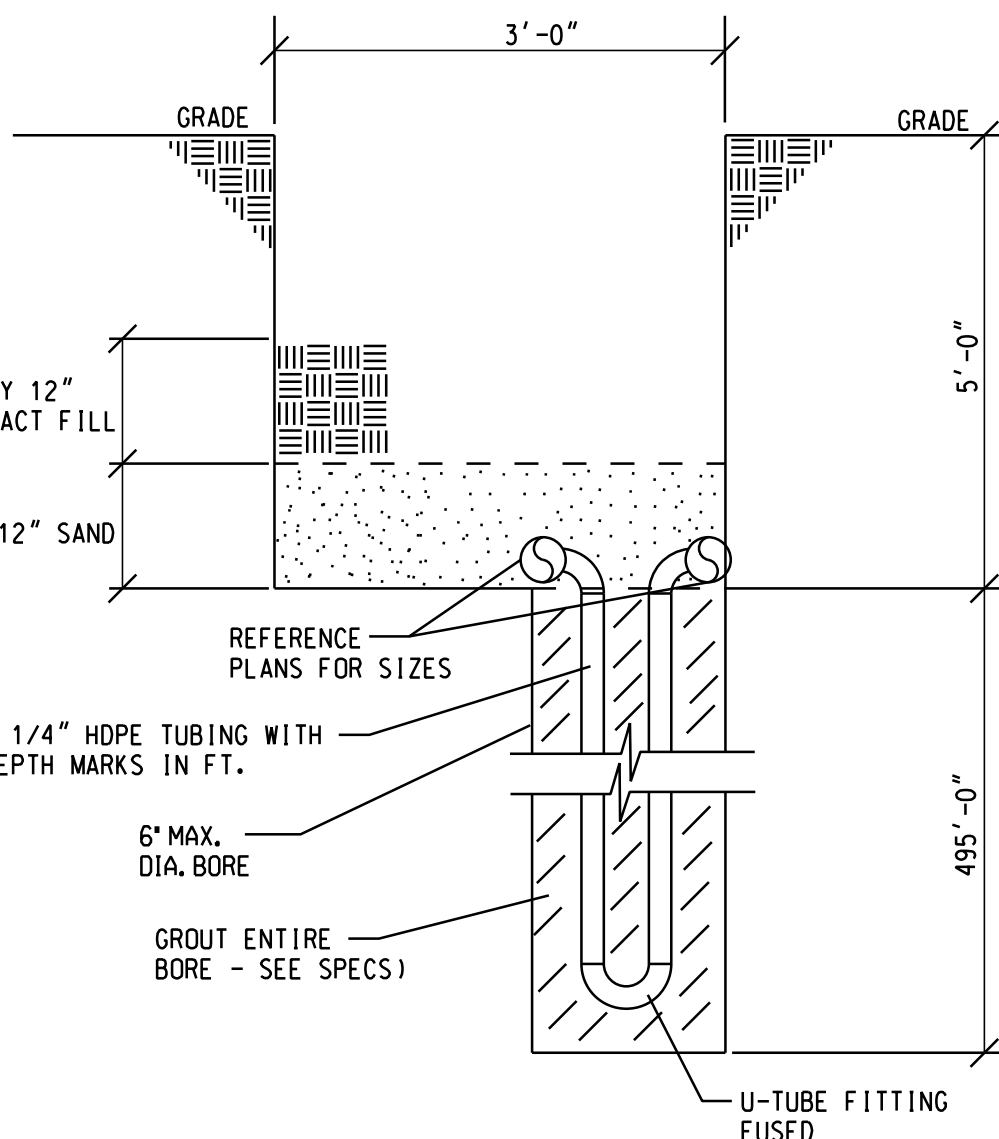


- GENERAL NOTES:
1. COORDINATE PIPE ROUTING WITH ALL OTHER UTILITIES AT BEGINNING OF PROJECT.
  2. BORES SHALL BE A MINIMUM OF 15 FEET FROM FOUNDATIONS
  3. BORES SHALL HAVE MINIMUM SEPARATION OF 25 FEET.
  4. COORDINATE SEQUENCING OF DRILLING WITH CONSTRUCTION SCHEDULE.
  5. REFERENCE SPECS FOR ADDITIONAL REQUIREMENTS.
  6. REFERENCE TYPICAL BORE DETAIL FOR ADDITIONAL INFORMATION.
  7. PIPE SIZES ARE SHOWN ON ONE BRANCH IN EACH FIELD. OTHER BRANCHES IN THE SAME FIELD SHALL HAVE THE SAME PIPE SIZES.

CONDUCTIVITY TEST RESULTS:  
DATE: February 6-8, 2014  
LOCATION: Chapel Hill, TN  
GROUND TEMPERATURE = 59.0-59.6°F  
BOREHOLE DIAMETER = 8" (0-60") w/CASING, 5.5" (60-500")  
U-BEND SIZE = 1.25" HDPE  
U-BEND LENGTH = FEET  
GROUT TYPE: WYO-BEN THERM-EX  
TEST DURATION = 47.1 HOURS  
FORMATION THERMAL CONDUCTIVITY = 1.56 Btu/hr-ft-F  
FORMATION THERMAL DIFFUSIVITY = 1.05 FT/DAY

DRILLERS REPORT INFORMATION FROM TEST BORE

DEPTH IN FEET	DESCRIPTION
FROM TO	
0 15	DIRT
15 26	BLUE/GREY LIMESTONE, FRACTURED
26 78	LIGHT BROWN/GREY LIMESTONE
78 245	BLUE/GREY LIMESTONE
245 330	LIGHT GREY LIMESTONE
340 405	MEDIUM BLUE/GREY LIMESTONE
405 465	MEDIUM GREY LIMESTONE
465 485	DARK GREY LIMESTONE
485 500	LIGHT GREY LIMESTONE



ENTECH

ENGINEERING INC.

ENTECH VIRGINIA WAY  
BRENTWOOD, TN 37027  
t. 615.373.2600  
email: entech@entech.com

SUITE 400  
TN 37027  
t. 615.373.4837  
entech.com

J3

Johnson + Bailey Architects P.C.

City Center  
100 East Vine St.  
Murfreesboro Tennessee  
37130  
615 · 890 · 4560  
Fax: 615 · 890 · 4564

Chapel Hill Intermediate School

425 South Horton Parkway  
Chapel Hill, Tennessee

REVISION      DATE

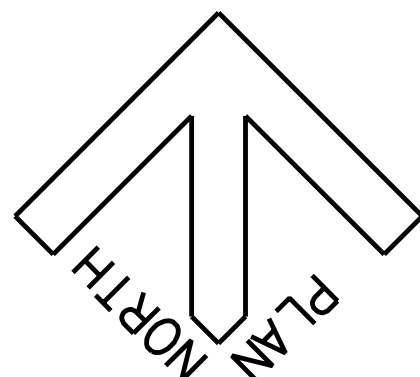
NOTES:

THIS DRAWING SHALL NOT BE REPRODUCED, PUBLISHED, OR USED IN ANY WAY WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT.



PROJECT NO. 1311  
DATE 04-08-14  
DRAWN BY E.E.I.  
CHECKED BY E.E.I.

M0.1



HVAC GEOTHERMAL  
SITE PLAN

SCALE 1" = 30'-0"





City Center  
100 East Vine St.  
Murfreesboro Tennessee  
37130  
615·890·4560  
Fax: 615·890·4564

Chapel  
Hill  
Intermediate  
School

425 South Horton Parkway  
Chapel Hill, Tennessee

REVISION	DATE
----------	------

NOTES:

THIS DRAWING SHALL NOT BE  
REPRODUCED, PUBLISHED, OR USED  
IN ANY WAY WITHOUT THE WRITTEN  
PERMISSION OF THE ARCHITECT.



PROJECT NO.	1311
DATE	04-08-14
DRAWN BY	E.E.I.
CHECKED BY	E.E.I.

## M1.1

FACTORY MOUNT DISCONNECT SWITCH, STARTER W/HOA, PROVIDE PURGE OPTION & DAMPER ON EXHAUST & SUPPLY, MOTORIZED SUPPLY AND GRAVITY EXHAUST BACKDRAFT DAMPERS (LOCATE IN DUCTWORK).

NOTES: UNIT SHALL BE A WATER SOURCE HEAT PUMP UNIT WITH HOT GAS REHEAT.  
E.W.T. = 86F COOLING AND 68F HEATING

ACCESSORIES:

- ① FLEXIBLE HOSE KIT W/AUTO FLOW CONTROL, ISOLATION VALVES, STRAINER, P-T PORTS & LOW POINT DRAIN.
- ② FILTER: 30% EFFICIENT, 2" DISPOSABLE

## SEE HOOD DETAILS &amp; SCHEDULES FOR ADDITIONAL FANS

DESIGN NOTE: PUMPS ARE DESIGNED TO RUN SIMULTANEOUSLY  
IN PARALLEL TO OBTAIN 100% CAPACITY.

UNIT DESIGNATION	HOOD#1A & B
TYPE	AIR CURTAIN - ISLAND
SERVICE	KITCHEN
CANOPY SIZE	15' -4"X5' X2' (TWO)
APPROVAL	U.L.
EXHAUST FAN	KEF# 1 & 2
EXHAUST AIR C.F.M.	2,660 & 2,660
HOOD EXHAUST AIR P.D. ("H <sub>2</sub> O)	0.746
FAN EXHAUST AIR P.D. ("H <sub>2</sub> O)	1.25
H.P.	1.5 & 1.5
VOLTAGE	460/3/60
E.F. MFR#/MODEL	BY HOOD MFR.
SUPPLY FAN	KMLA#1
SUPPLY AIR CFM	4,256
HOOD SUPPLY AIR P.D. ("H <sub>2</sub> O)	---
FAN SUPPLY AIR P.D. ("H <sub>2</sub> O)	0.55
H.P.	3.0
VOLTAGE	460/3/60
HEATING SECTION	---
FUEL	NATURAL GAS
HEATING CAP. INPUT (M.B.H.)	273.0
HEATING CAP. OUTPUT (M.B.H.)	251.1
E.A.D.B. / L.A.D.B.	10/65
COOLING COIL	---
TOT/SENS CAP. (MBH)	99.8/57.2
E.A.D.B./E.A.W.B.	95/78
L.A.D.B.	84°F
S.F. MODEL#	A3-0-500-G18-MPU
S.F. MANUFACTURER	CAPTIVE AIRE
S.F. UNIT WEIGHT	2,117
CONDENSING UNIT	KCU#1 & 2
TYPE	UNIT MTD. C.U.
O.A.D.B.	95
VOLTAGE	460-3-60
UNIT M.C.A./M.D.C.P.	2 @ 10.5/15
C.U. MODEL NO.	2 @ 5 TON
ACCESSORIES	---
CURB	FACTORY
FILTERS	U.L. GREASE
O.A. INTAKE HOOD	YES
O.A. DAMPERS	YES
TYPE FIRING CONTROL	MODULATING
FIRE EXTING. SYSTEM	ANSUL R102-U.L.300
HOOD MANUFACTURER	CAPTIVE AIRE
HOOD MODEL #	6624 ND-2-ACPSF-F
HOOD WEIGHT	1,907 TOTAL
NOTE: SEE HOOD DETAILS ON M4.4 & M4.5 FOR ADDITIONAL INFORMATION	

SYMBOL	DESCRIPTION
	SUPPLY DUCTWORK
	RETURN DUCTWORK
	EXHAUST DUCTWORK
	OUTSIDE AIR DUCTWORK
	FIRE DAMPER
	SUPPLY AIR DIFFUSER
	RETURN OR EXHAUST AIR REGISTER
	DAMPER
	ELECTRIC DUCT HEATER
	COIL - SEE PLANS FOR TYPE
	ELECTRIC WALL HEATER
	UNDERCUT DOOR 3/4"
	DOOR GRILLE - SEE PLANS FOR SIZE
	MANUAL VOLUME DAMPER (M.V.D.)
S.D.	SMOKE DETECTOR
8"Ø 200	8"Ø NECK SUPPLY AIR DIFFUSER @ 200 C.F.M.
6"x6" 150R	8"x8" RETURN AIR REGISTER @ 150 C.F.M.
6"x6" 100E	6"x6" EXHAUST AIR REGISTER @ 100 C.F.M.
	DUCT TURNED DOWN
LWS	LOOP WATER SUPPLY
LWR	LOOP WATER RETURN
	CHECK VALVE
	UNION
	BUTTERFLY OR BALL VALVE
	GATE VALVE
	O.S.&Y. GATE VALVE
	CONTROL VALVE - TWO WAY
	CONTROL VALVE - THREE WAY
	SPACE THERMOSTAT OR SENSOR
	SPACE HUMIDITY SENSOR
	SUPPLY DUCT THRU SLAB OR ROOF
	RETURN OR EXHAUST DUCT THRU SLAB OR ROOF
A.D.	ACCESS DOOR
	ELECTRIC UNIT HEATER - CEILING MOUNTED
U.O.N.	UNLESS OTHERWISE NOTED
	ROUND DUCTWORK OR FLUE UP THRU ROOF OR SLAB
SA	SUPPLY AIR
RA	RETURN AIR
MA	MIXED AIR
OA	OUTSIDE AIR
OA1	OUTSIDE AIR INTAKE
SAR	SUPPLY AIR REGISTER
RAR	RETURN AIR REGISTER
HP	HEAT PUMP (WATER SOURCE)
EF	EXHAUST FAN
RAF	RELIEF AIR FAN
DDC	DIRECT DIGITAL CONTROLS
CO2	CARBON DIOXIDE SENSOR

UNIT DESIGNATION	EDH#B1	EDH#B2
TYPE	SLIP-IN	SLIP-IN
SERVICE	CAFETERIA	MEDIA CENTER
C.F.M.	900	300
DUCT SIZE (INSIDE CLEAR)	14X12	10X10
K.W.	10.0	4.0
VOLTAGE	460/3/60	277/1/60
STAGES	2	1
CONTROL CIRCUIT VOLTAGE	24	24
INTERLOCK	HP/AIR FLOW	HP/AIR FLOW
MANUFACTURER	INDEECO	INDEECO
MODEL #	OUA	OUA

WATER SOURCE HEAT PUMP SCHEDULE														
UNIT DESIGNATION	HP-A1 THRU A5	HP-A6	HP-B1	HP-B2	HP-B3	HP-B4 THRU B9 & B12	HP-B10	HP-B11	HP-B13 & B14	HP-B15	HP-B16	HP-B17	HP-B18	HP-B19
TYPE	VERTICAL	HORIZONTAL	VERTICAL	VERTICAL	VERTICAL	VERTICAL	HORIZONTAL	VERTICAL	VERTICAL	HORIZONTAL	VERTICAL	VERTICAL	VERTICAL	VERTICAL
SERVICE	CLASSROOM	CORRIDOR	OFFICE (EXT)	OFFICE (INT)	CORRIDOR	CLASSROOM	CORRIDOR	TWA B111	CLASSROOM	I.T. MDF ROOM	MEDIA CENTER	CAFETERIA	CORRIDOR	CORRIDOR
FAN PERFORMANCE	ECM	ECM	ECM	ECM	---	ECM	ECM	ECM	ECM	ECM	---	---	ECM	ECM
SUPPLY AIR (C.F.M.)	1200	2000	1100	1600	3000	1200	2000	800	800	350	4000	6000	2000	2000
OUTSIDE AIR (C.F.M.)	375 (PRETREATED)	175	250	300	300	375 (PRETREATED)	200	150	200 (PRETREATED)	0	500	1150	150	250
EXT. STATIC PRESS. ('H <sub>2</sub> O)	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.4	1.15	0.5	0.5
FAN POWER (H.P.)	0.5	1.0	0.5	0.75	1.5	0.5	1.0	0.333	0.333	0.1	2.0	3.0	1.0	1.0
COOLING/HEATING PERFORMANCE	410A 2-STAGE	410A 2-STAGE	410A 2-STAGE	410A 2-STAGE	410A	410A 2-STAGE	410A 2-STAGE	410A 2-STAGE	410A 2-STAGE	410A SINGLE ST	410A	410A	410A 2-STAGE	410A 2-STAGE
WATER FLOW (G.P.M.)	9.0	15.0	9.0	12.0	24.0	9.0	15.0	6.0	6.0	3.0	30.0	45.0	15.0	15.0
WATER PRESSURE DROP ('H <sub>2</sub> O)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
COOLING E.A.T.	80/67	80/67	80/67	80/67	80/67	80/67	80/67	80/67	80/67	80/67	80/67	80/67	80/67	80/67
COOLING E.W.T./E.E.R. (F/P)	80.6/17.8/20.9	80.6/17.1/19.7	80.6/18.1/21.2	80.6/16.8/20	80.6/15.7/N/A	80.6/17.8/20.9	80.6/17.1/19.7	80.6/17.9/20.7	80.6/17.9/20.7	80.6/16.6/N/A	80.6/15.7/N/A	80.6/16.3/N/A	80.6/17.1/19.7	80.6/17.1/19.7
COOLING CAP.T/S (M.B.H.)	40.33/28.75	65.56/46.95	39.76/27.17	50.38/36.37	85.96/55.74	40.33/28.75	65.56/46.95	27.22/19.21	27.22/19.21	13.18/9.38	126.46/87.19	196.44/137.91	65.56/46.95	65.56/46.95
HEATING E.A.T.	68	68	68	68	68	68	68	68	68	68	68	68	68	68
HEATING E.W.T. / C.O.D.P.	68/5.39	68/4.96	68/5.37	68/5.0	68/5.7	68/5.39	68/4.96	68/5.25	68/5.25	68/5.15	68/5.84	68/5.94	68/4.96	68/4.96
HEATING CAP. (M.B.H.)	45.39	75.22	45.04	56.65	128.30	45.39	75.22	29.47	29.47	15.80	196.59	312.99	75.22	75.22
ELECTRICAL DATA	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UNIT VOLTAGE	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	277/1/60	460/3/60	460/3/60	460/3/60	460/3/60
UNIT F.L.A.	9.8	14.1	9.8	11.9	13.9	9.8	14.1	6.1	6.1	4.96	17.6	27.4	14.1	14.1
UNIT M.C.A./M.O.C.P.	11.2/15	15.9/20	11.2/15	13.5/15	16.2/20	11.2/15	15.9/20	6.98/15	6.98/15	6.01/15	20.4/25	31.6/40	15.9/20	15.9/20
ACCESSORIES	---	---	①	①	---	---	---	---	---	---	①	①	---	---
FILTER/EFFICIENCY	2" DISPOSABLE/30%	2" DISPOSABLE/30%	2" DISPOSABLE/30%	2" DISPOSABLE/30%	1" DISPOSABLE/30%	2" DISPOSABLE/30%	2" DISPOSABLE/30%	2" DISPOSABLE/30%	2" DISPOSABLE/30%	2" DISPOSABLE/30%	1" DISPOSABLE/30%	1" DISPOSABLE/30%	2" DISPOSABLE/30%	2" DISPOSABLE/30%
FLOW CONTROL HOSE KIT	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
MANUFACTURER	DAIKIN McQUAY	DAIKIN McQUAY	DAIKIN McQUAY	DAIKIN McQUAY	DAIKIN McQUAY	DAIKIN McQUAY	DAIKIN McQUAY	DAIKIN McQUAY	DAIKIN McQUAY	DAIKIN McQUAY	DAIKIN McQUAY	DAIKIN McQUAY	DAIKIN McQUAY	DAIKIN McQUAY
MODEL #	WGTV-0381	WGTH-0641	WGTV-0381	WGTV-0491	WLVC-1096	WGTV-0381	WGTH-0641	WGTV-0261	WGTV-0261	WGSB-0121	WLVC-1120	WLVC-1180	WGTV-0641	WGTV-0641
WEIGHT (LBS.)	313	472	313	352	588	313	472	231	231	151	681	1029	470	470
APPROX. DIMENSIONS (WxLxH)	25"x33"x51"	25"x84"x22"	25"x33"x51"	25"x33"x51"	55"x28"x56"	25"x33"x51"	25"x84"x22"	23"x26"x48"	23"x26"x48"	22"x23"x35"	55"x28"x56"	81"x30"x67"	25"x33"x59"	25"x33"x59"
① HOT GAS REHEAT	NOTE: UNITS WITH ECM MOTORS REQUIRE 4-WIRE POWER INCLUDING A NEUTRAL													

WATER SOURCE HEAT PUMP SCHEDULE									
UNIT DESIGNATION	HP-C1	HP-C2 & C3	HP-C4	HP-C5	HP-C6	HP-D1 THRU D4	HP-D5	HP-D6 & D7	HP-D8 & D9
TYPE	VERTICAL	VERTICAL	HORIZONTAL	VERTICAL	VERTICAL	VERTICAL	HORIZONTAL	VERTICAL	VERTICAL
SERVICE	FOOD PREP/DISHWASHING	CLASSROOM	MECH./ELEC.	GYM	PLATFORM	CLASSROOM	CORRIDOR	CLASSROOM	ALTERNATE
FAN PERFORMANCE	----	ECM	ECM	----	ECM	ECM	ECM	ECM	ECM
SUPPLY AIR (C.F.M.)	6000	1200	1600	7200	1400	1200	2000	1200	1200
OUTSIDE AIR (C.F.M.)	1150	375 (PRETREATED)	0	1175	275	375 (PRETREATED)	200	375 (PRETREATED)	375 (PRETREATED)
EXT. STATIC PRESS. ('H <sub>2</sub> O)	1.15	0.5	0.5	0.72	0.5	0.5	0.5	0.5	0.5
FAN POWER (H.P.)	3.0	0.5	0.75	3.0	0.75	0.5	1.0	0.5	0.5
COOLING/HEATING PERFORMANCE	410A	410A 2-STAGE	410A 2-STAGE	410A	410A 2-STAGE	410A 2-STAGE	410A 2-STAGE	410A 2-STAGE	410A 2-STAGE
WATER FLOW (G.P.M.)	45.0	9.0	12.0	54.0	10.5	9.0	15.0	9.0	9.0
WATER PRESSURE DROP ('H <sub>2</sub> O)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
COOLING E.A.T.	80/67	80/67	80/67	80/67	80/67	80/67	80/67	80/67	80/67
COOLING E.W.T./E.E.R. (F/P)	80.6/16.3/N/A	80.6/17.8/20.9	80.6/16.8/20	80.6/16.4/N/A	80.6/17.3/19.8	80.6/17.8/20.9	80.6/17.1/19.7	80.6/17.8/20.9	80.6/17.8/20.9
COOLING CAP./T/S (M.B.H.)	196.44/137.91	40.33/28.75	50.38/36.37	235.54/165.62	44.85/30.91	40.33/28.75	65.56/46.95	40.33/28.75	40.33/28.75
HEATING E.A.T.	68	68	68	68	68	68	68	68	68
HEATING E.W.T. / C.O.P.	68/5.94	68/5.39	68/5.0	68/6.0	68/4.98	68/5.39	68/4.96	68/5.39	68/5.39
HEATING CAP. (M.B.H.)	312.99	45.39	56.65	398.35	50.21	45.39	75.22	45.39	45.39
ELECTRICAL DATA	----	----	----	----	----	----	----	----	----
UNIT VOLTAGE	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60
UNIT F.L.A.	27.4	9.8	11.9	36.4	11.7	9.8	14.1	9.8	9.8
UNIT M.C.A./M.O.C.P.	31.6/40	11.2/15	13.5/15	41.7/50	13.3/15	11.2/15	15.9/20	11.2/15	11.2/15
ACCESSORIES	①	----	----	①	----	----	----	----	----
FILTER/EFFICIENCY	1" DISPOSABLE/30%	2" DISPOSABLE/30%	2" DISPOSABLE/30%	1" DISPOSABLE/30%	2" DISPOSABLE/30%	2" DISPOSABLE/30%	2" DISPOSABLE/30%	2" DISPOSABLE/30%	2" DISPOSABLE/30%
FLOW CONTROL HOSE KIT	YES	YES	YES	YES	YES	YES	YES	YES	YES
MANUFACTURER	DAIKIN McQUAY	DAIKIN McQUAY	DAIKIN McQUAY	DAIKIN McQUAY	DAIKIN McQUAY	DAIKIN McQUAY	DAIKIN McQUAY	DAIKIN McQUAY	DAIKIN McQUAY
MODEL #	WLVC-1180	WGTV-0381	WGTH-0491	WLVC-1215	WGTV-0441	WGTV-0381	WGTH-0641	WGTV-0381	WGTV-0381
WEIGHT	1029	313	352	1029	350	313	472	313	313
APPROX. DIMENSIONS	81"x30"x67"	25"x33"x51"	25"x79"x22"	81"x30"x67"	25"x33"x51"	25"x33"x51"	25"x84"x22"	25"x33"x51"	25"x33"x51"

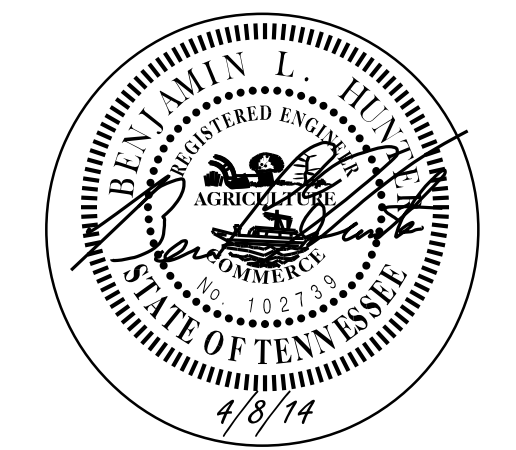
① HOT GAS REHEAT

NOTE: UNITS WITH ECM MOTORS REQUIRE 4-WIRE POWER INCLUDING A NEUTRAL

[illegible]

NOTES:

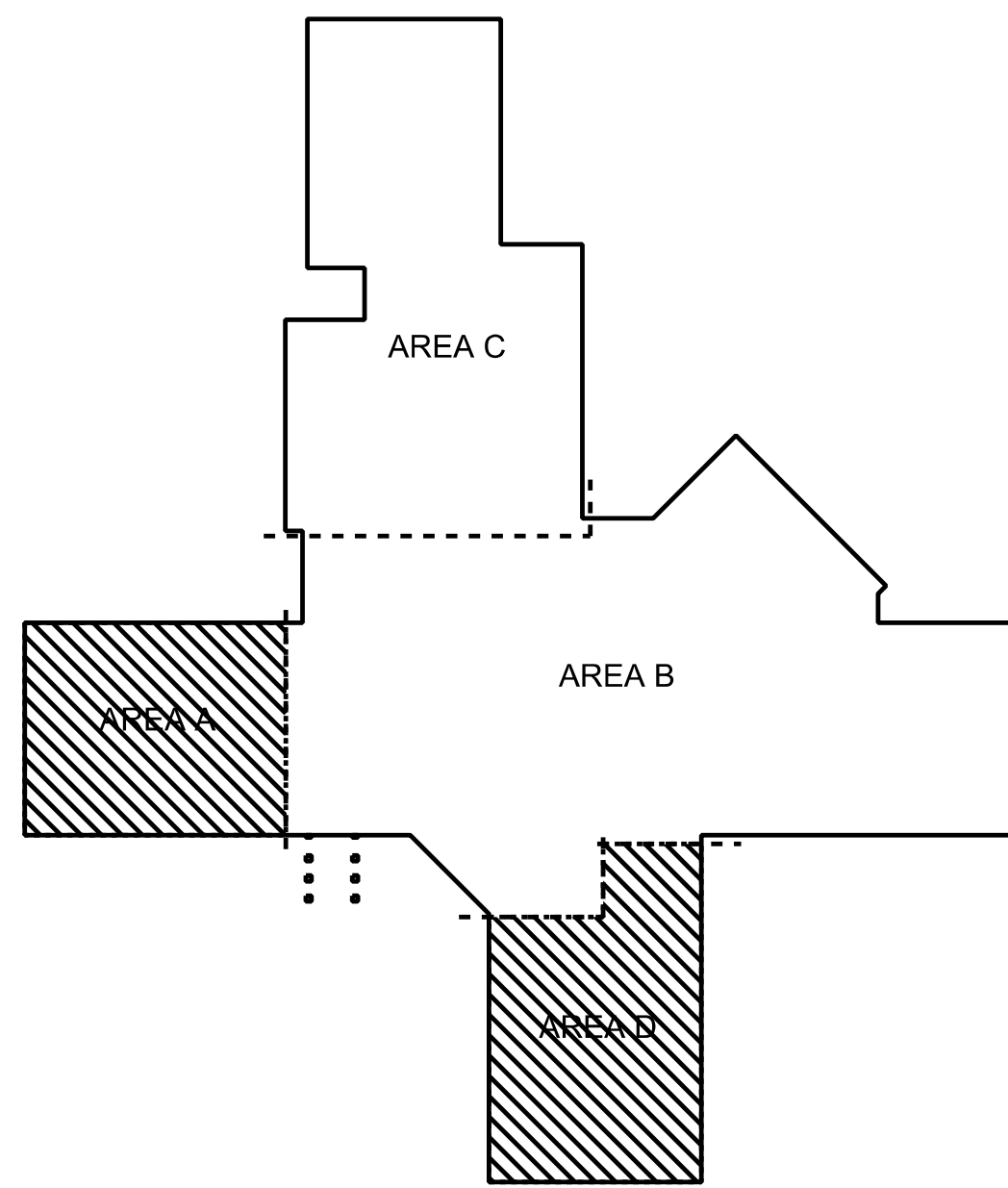
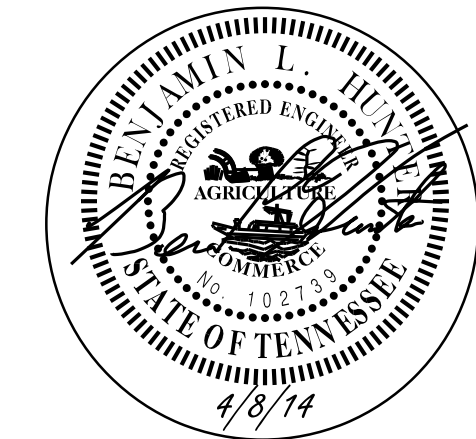
THIS DRAWING SHALL NOT BE  
REPRODUCED, PUBLISHED, OR USED  
IN ANY WAY WITHOUT THE WRITTEN  
PERMISSION OF THE ARCHITECT.



PROJECT NO. 1311  
DATE 04-08-14  
DRAWN BY E.E.I.  
CHECKED BY E.E.I.



C:\1326A\1326A.MD\_A01.D01 4/9/2014 12:10:16 PM

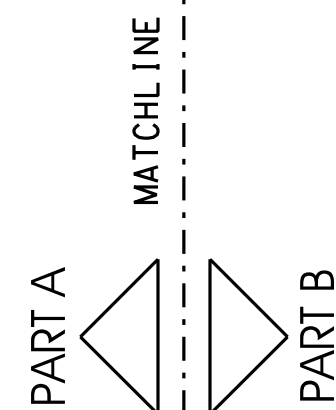
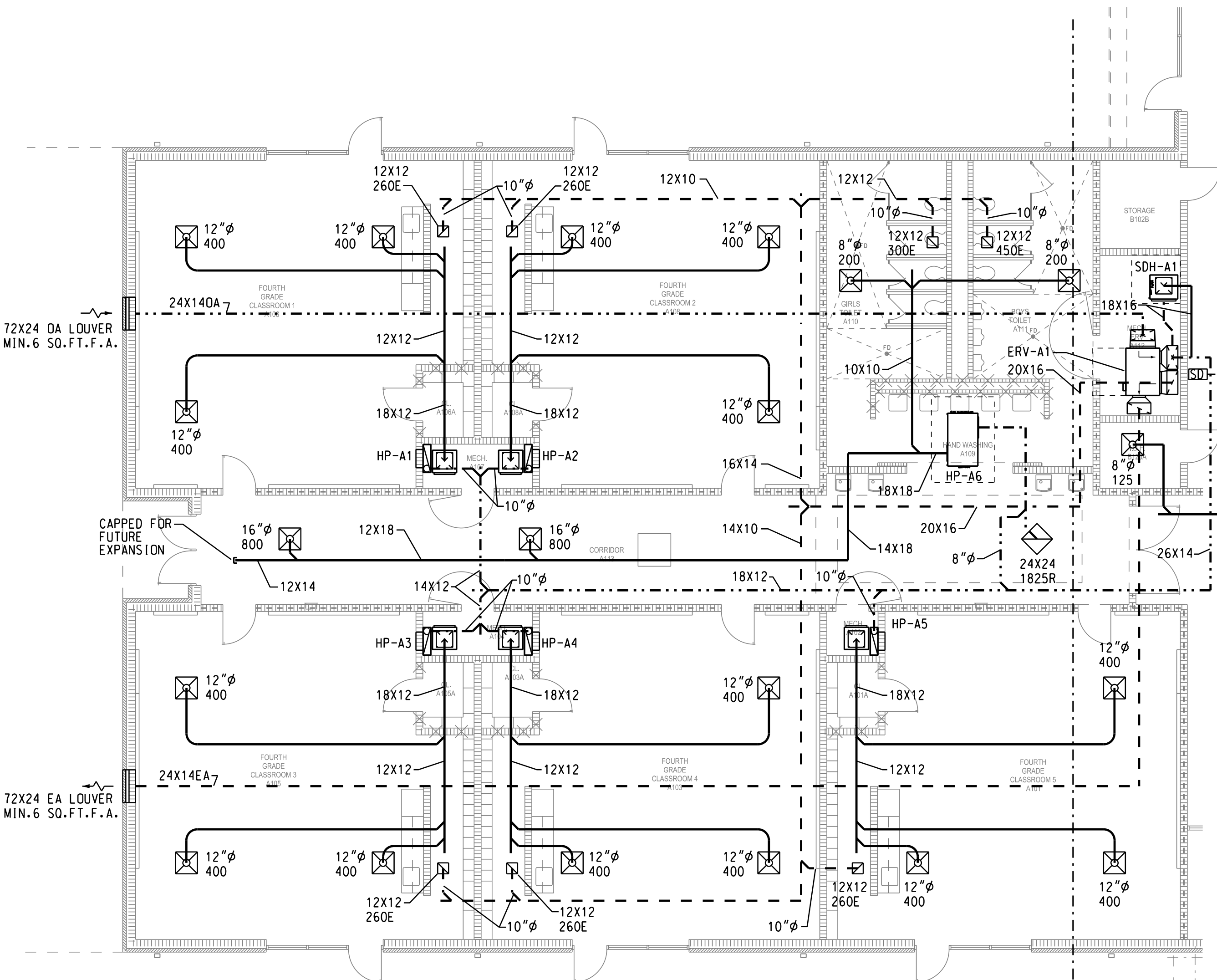


KEY PLAN

WALL SYMBOLS LEGEND	
[Symbol]	CASUAL WALL - NOT FIRE RATED
[Symbol]	CASUAL WALL - SMOKE PARTITION
[Symbol]	CASUAL WALL - ONE HOUR FIRE RATED
[Symbol]	CASUAL WALL - TWO HOUR FIRE RATED
[Symbol]	CASUAL WALL - THREE HOUR FIRE RATED
[Symbol]	CASUAL WALL WITH BRICKSTONE VENEER EXTERIOR WALL
[Symbol]	EXTENDED HEIGHT OF THIS WALL TO A HEIGHT OF 10 FEET COULD BE ACHIEVED BY CHANGING TO ANY WALL TYPE
[Symbol]	CASUAL WALL - TOILET PARTITION
[Symbol]	CASUAL WALL HORIZONTAL BEARING RESISTANCE OF THIS WALL TO BE DETERMINED BY THE ENGINEER. CONCRETE TO BE USED ABOVE AND BELOW STUDY/STAIR WALKWAYS WALL.
* UNLESS BALANCE CALL FOR ALL EXPOSED TO DEGREE CASUAL CORNERS WITH 2 HOUR FIRE RATED CASUAL	
* EXTERIOR CORNER BEARING WALLS SHALL BE CONSTRUCTED WITH 1 HOUR FIRE RATED CASUAL	
* EXTERIOR WALLS SHALL BE METAL STUD AT AREAS WITH METAL STUD HOLES EXPOSED TO CORNERS SHOWN AT BOTTOM WALL CORNER, BRASS NEEDED CORNER.	

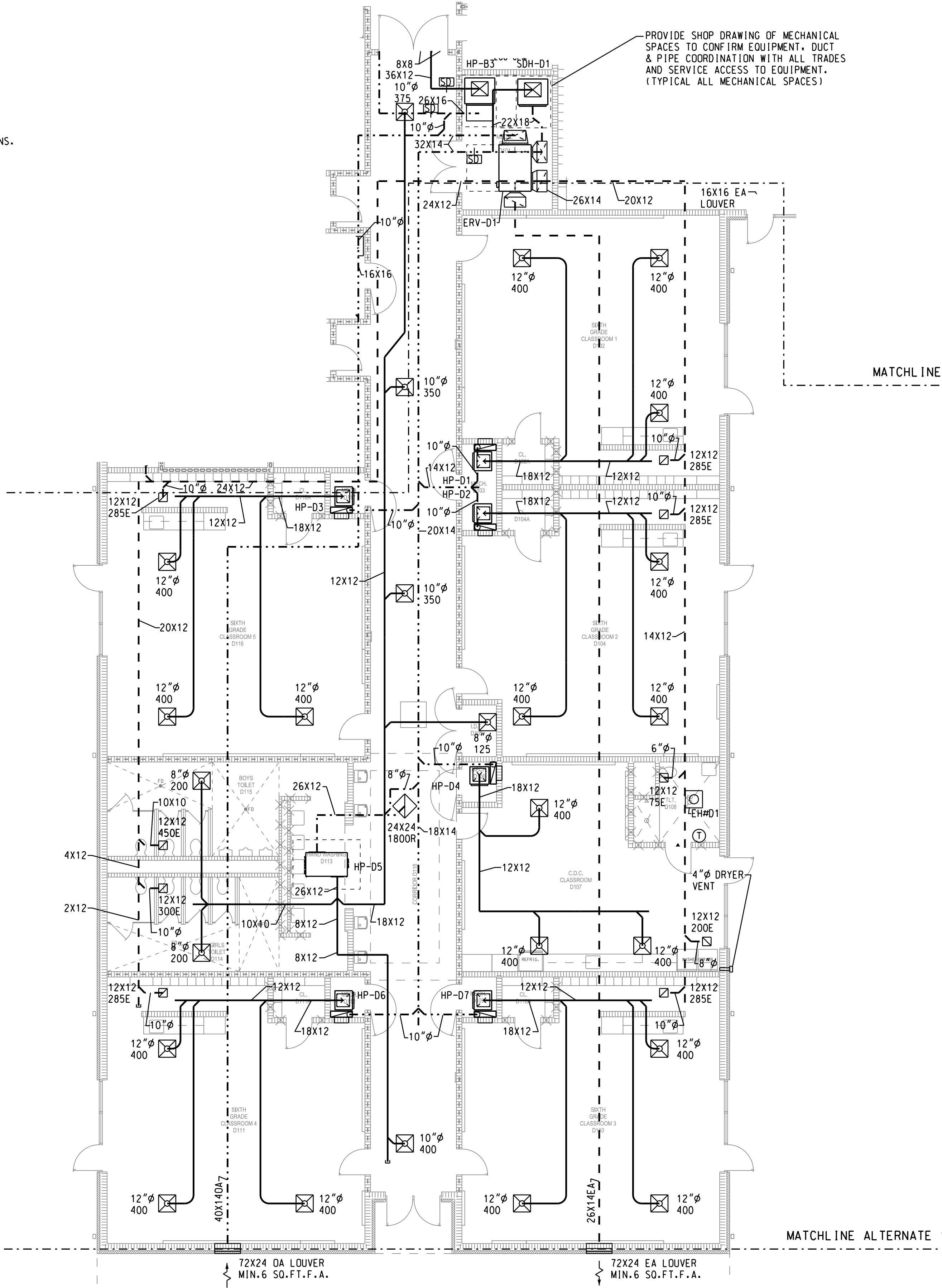
GENERAL NOTES:

- COORDINATE DUCTWORK WITH ALL TRADES PRIOR TO FABRICATION. SUBMIT ANY MAJOR CHANGES IN DUCT ROUTING OR DUCT SIZING AS A SHOP DRAWING TO THE ARCHITECT/ENGINEER FOR REVIEW.
- COORDINATE CEILING AIR INLETS AND OUTLETS WITH REFLECTED CEILING PLAN. DO NOT LOCATE ANY AIR OUTLETS WITHIN 3 FEET OF CEILING SMOKE DETECTORS.
- MAINTAIN CLEARANCES FROM ELECTRICAL PANELS AS REQUIRED BY N.E.C.
- MAINTAIN CLEARANCES FOR SERVICE OF HVAC EQUIPMENT AS REQUIRED BY MANUFACTURER AND NEC 110.26. PROVIDE MECHANICAL ROOM SHOP DRAWINGS AS REQUIRED FOR COORDINATION.
- REFERENCE CONTROL SCHEMATICS & DUCTWORK DETAILS FOR MANUAL & AUTOMATIC DAMPER LOCATIONS.
- REFERENCE ARCHITECTURAL ELEVATIONS FOR LOCATIONS OF LOUVERS AND WALL CAPS.
- TESTING ADJUSTING & BALANCING OF AIR SHALL INITIALLY BE ACCOMPLISHED AT UNOCCUPIED CONDITIONS AS INDICATED ON THE DRAWINGS AND THEN THE OUTSIDE AIR BALANCED WITH RETURN AIR INLETS REBALANCED PROPORTIONALLY LOWER TO ACCOUNT FOR DIFFERENCE.
- SEE SHEET M4.1 FOR TYPICAL CLASSROOM MECHANICAL ROOM LARGE SCALE PLAN.
- SEE M3.1 FOR T'STAT LOCATIONS.



H.V.A.C.  
FLOOR PLAN AREA - A

SCALE 1/8" = 1'-0"



BASE

MATCHLINE ALTERNATE 1

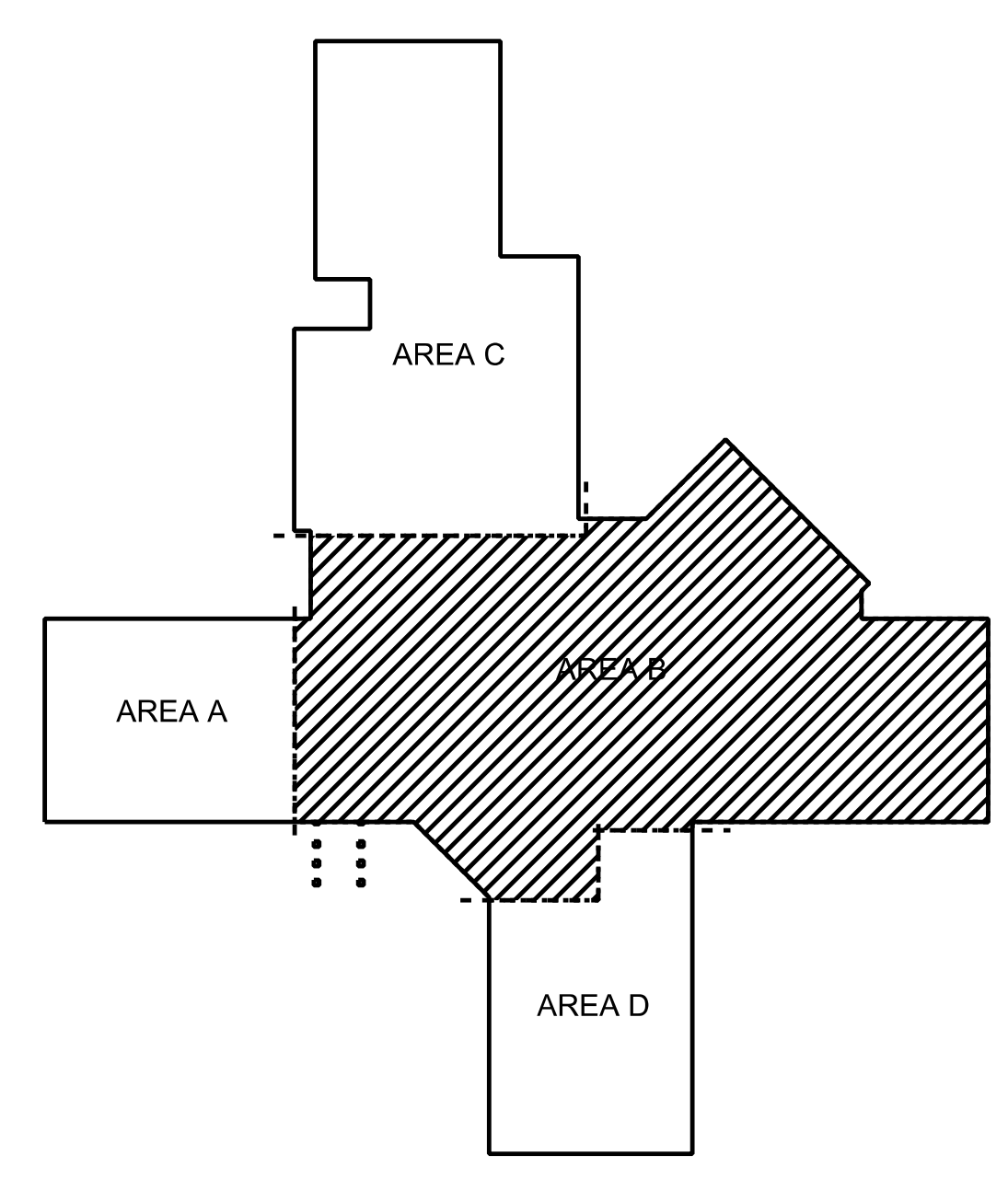
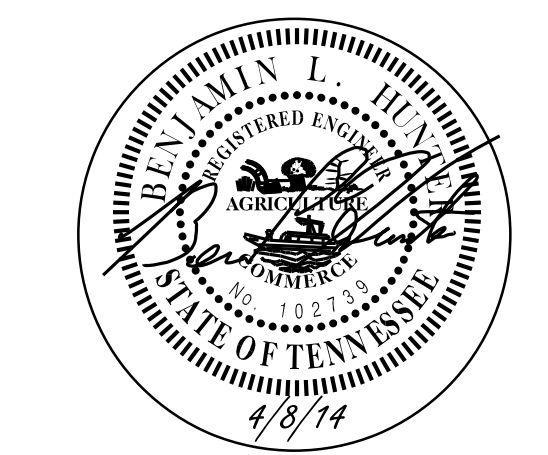
H.V.A.C.  
FLOOR PLAN AREA - D

SCALE 1/8" = 1'-0"





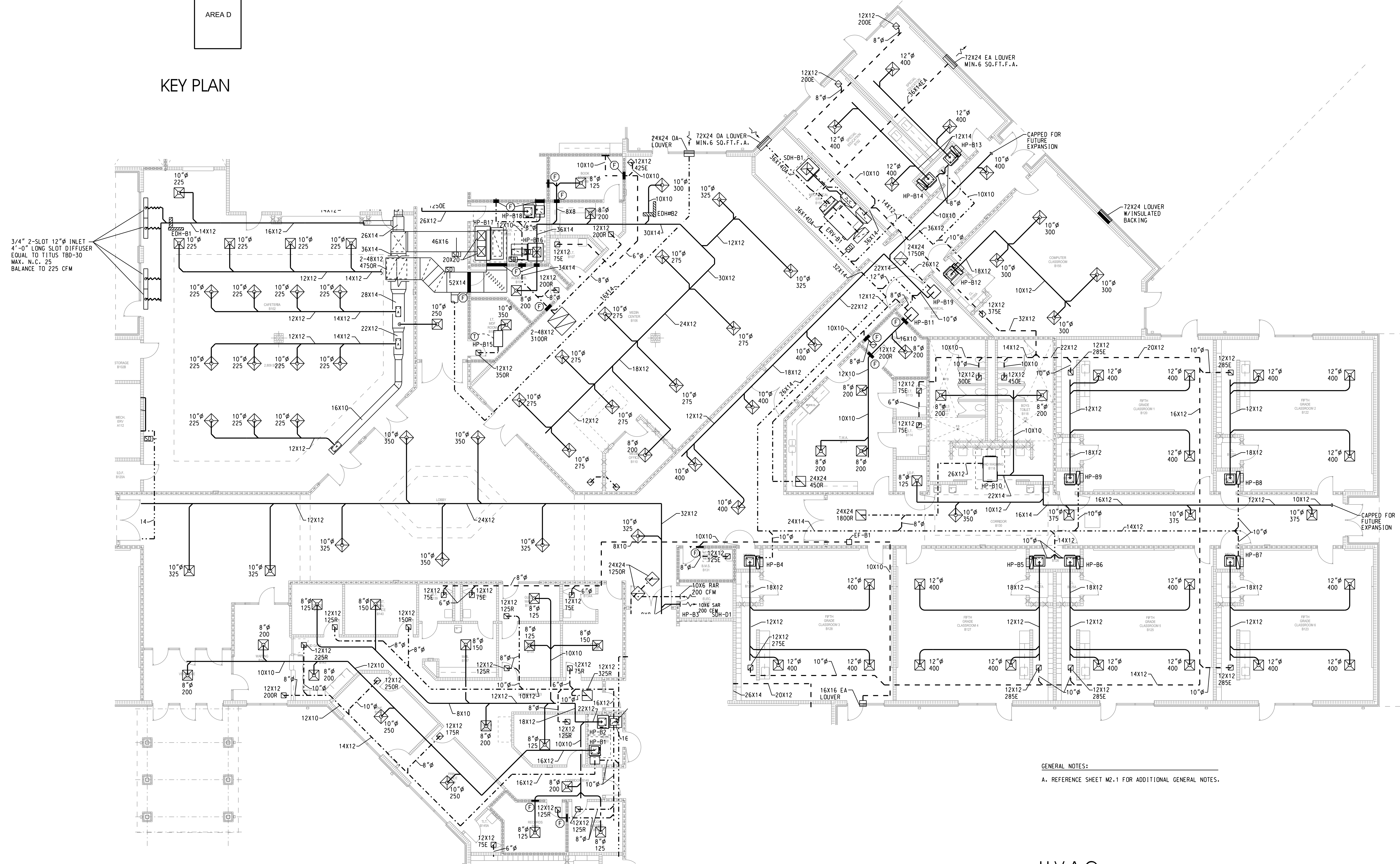
C:\1326A\1326A.MXD 4/9/2014 12:11:26 PM



WALL SYMBOLS LEGEND

[Symbol]	CASUAL WALL - NOT FIRE RATED
[Symbol]	CASUAL WALL - SMOKE PARTITION
[Symbol]	CASUAL WALL - ONE HOUR FIRE RATED
[Symbol]	CASUAL WALL - TWO HOUR FIRE RATED
[Symbol]	CASUAL WALL - THREE HOUR FIRE RATED
[Symbol]	CASUAL WALL - THREE HOUR FIRE BARRIER
[Symbol]	CASUAL WALL WITH BRICKSTONE VENEER EXTERIOR WALL
[Symbol]	INTERIOR VENEER OF THE WALL TO A HURRICANE OR TYPICAL COURSE ABOVE CEILING APPLIED TO ANY WALL FIRE
[Symbol]	CASUAL WALL - TOILET PARTITION
[Symbol]	CASUAL WALL WITH NON-FLOOR FINISHING EXTENDED TO A HURRICANE OR TYPICAL COURSE ABOVE CEILING APPLIED TO ANY WALL FIRE
[Symbol]	CASUAL WALL WITH NON-FLOOR FINISHING EXTENDED TO A HURRICANE OR TYPICAL COURSE ABOVE CEILING APPLIED TO ANY WALL FIRE

\* THREE BALANCE CASUAL FOR ALL EXPOSED NON-FIRE RATED CASUAL CORNERS  
\* EXTERIOR LONG BEARING WALLS SHALL BE CONSTRUCTED WITH 1 HOUR FIRE RATED CASUAL  
\* EXTERIOR LONG BEARING WALLS SHALL BE CONSTRUCTED WITH 1 HOUR FIRE RATED CASUAL  
\* EXTERIOR LONG BEARING WALLS SHALL BE CONSTRUCTED WITH 1 HOUR FIRE RATED CASUAL  
\* EXTERIOR LONG BEARING WALLS SHALL BE CONSTRUCTED WITH 1 HOUR FIRE RATED CASUAL



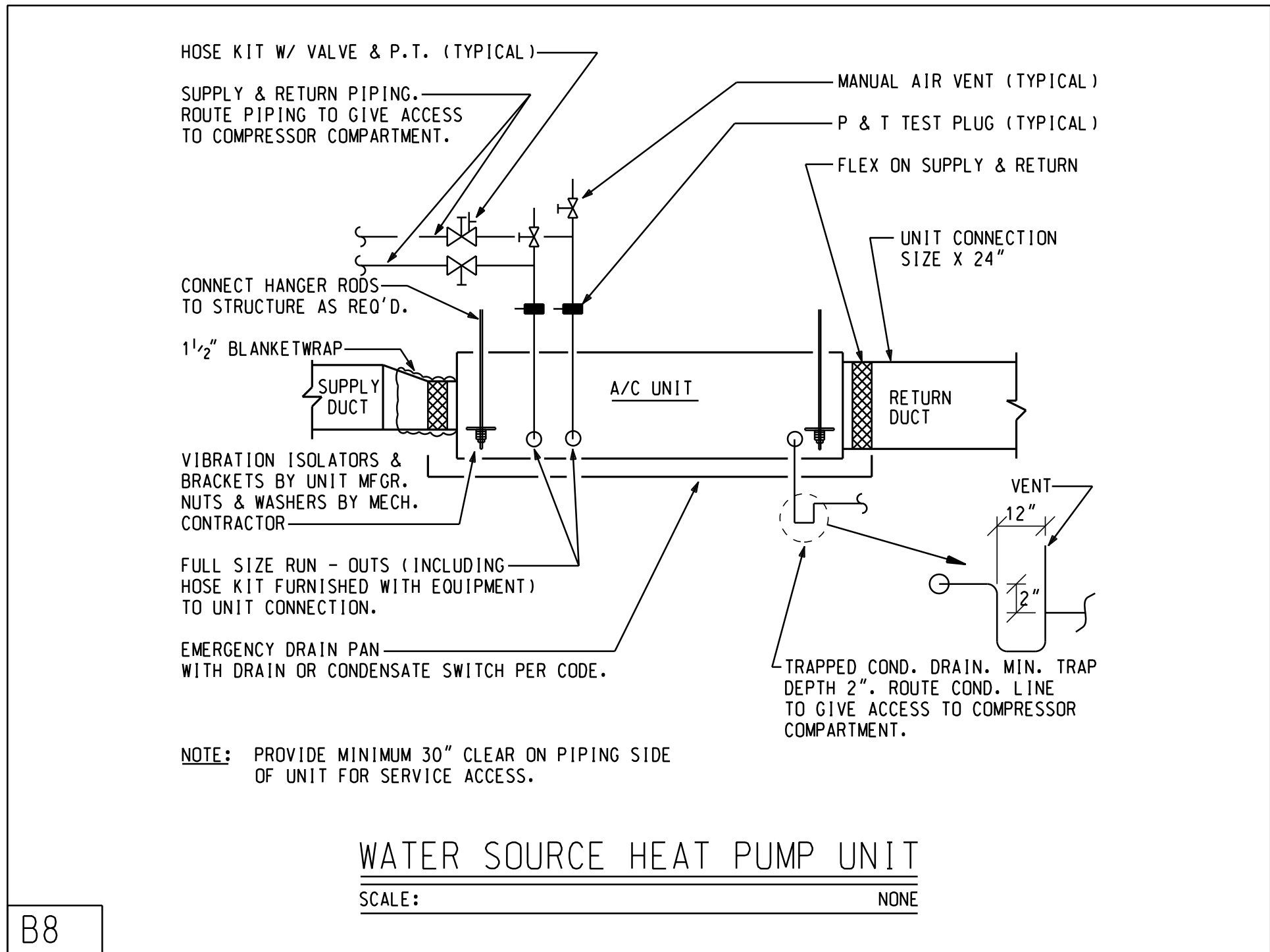
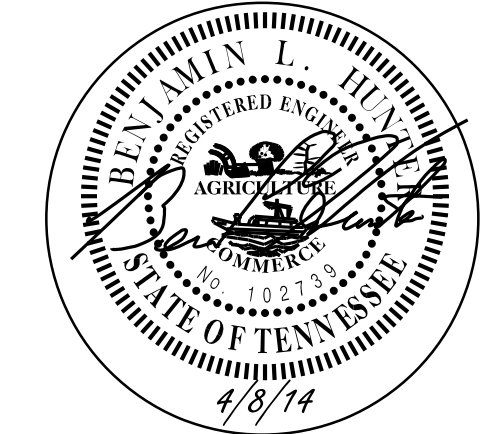




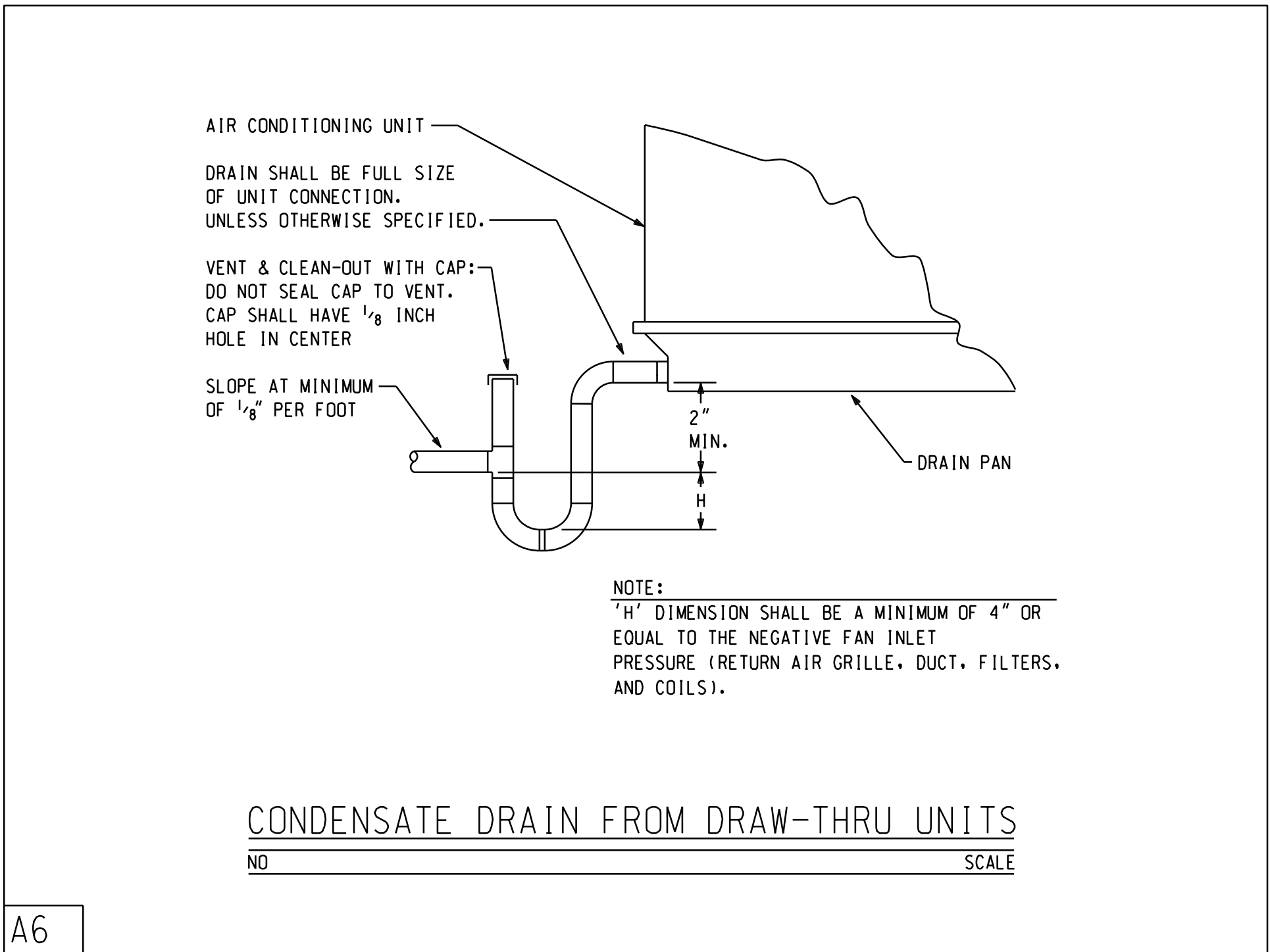




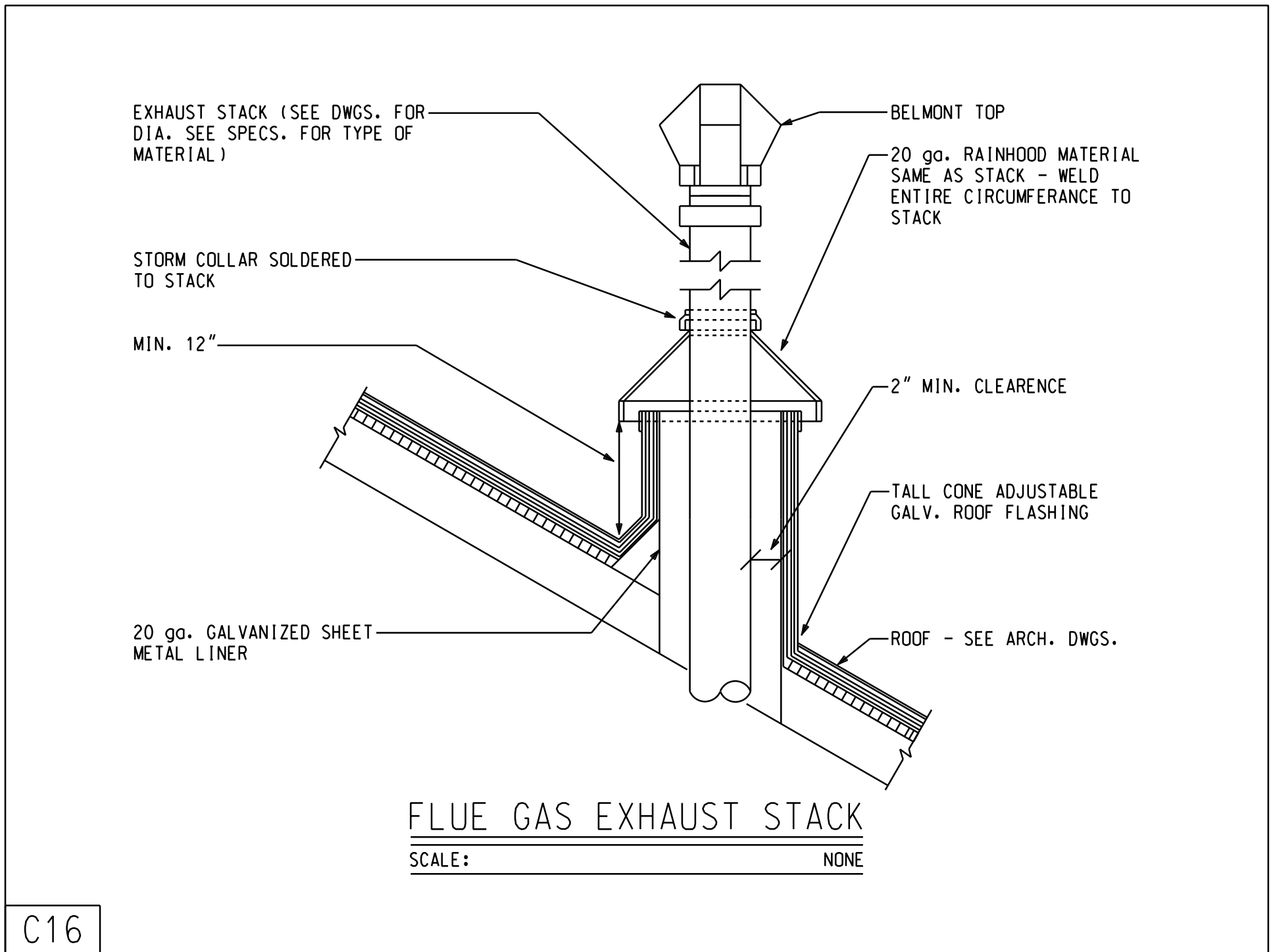
C:\1326A\1326-mech\001.dgn  
4/9/2014  
12:12:25 PM



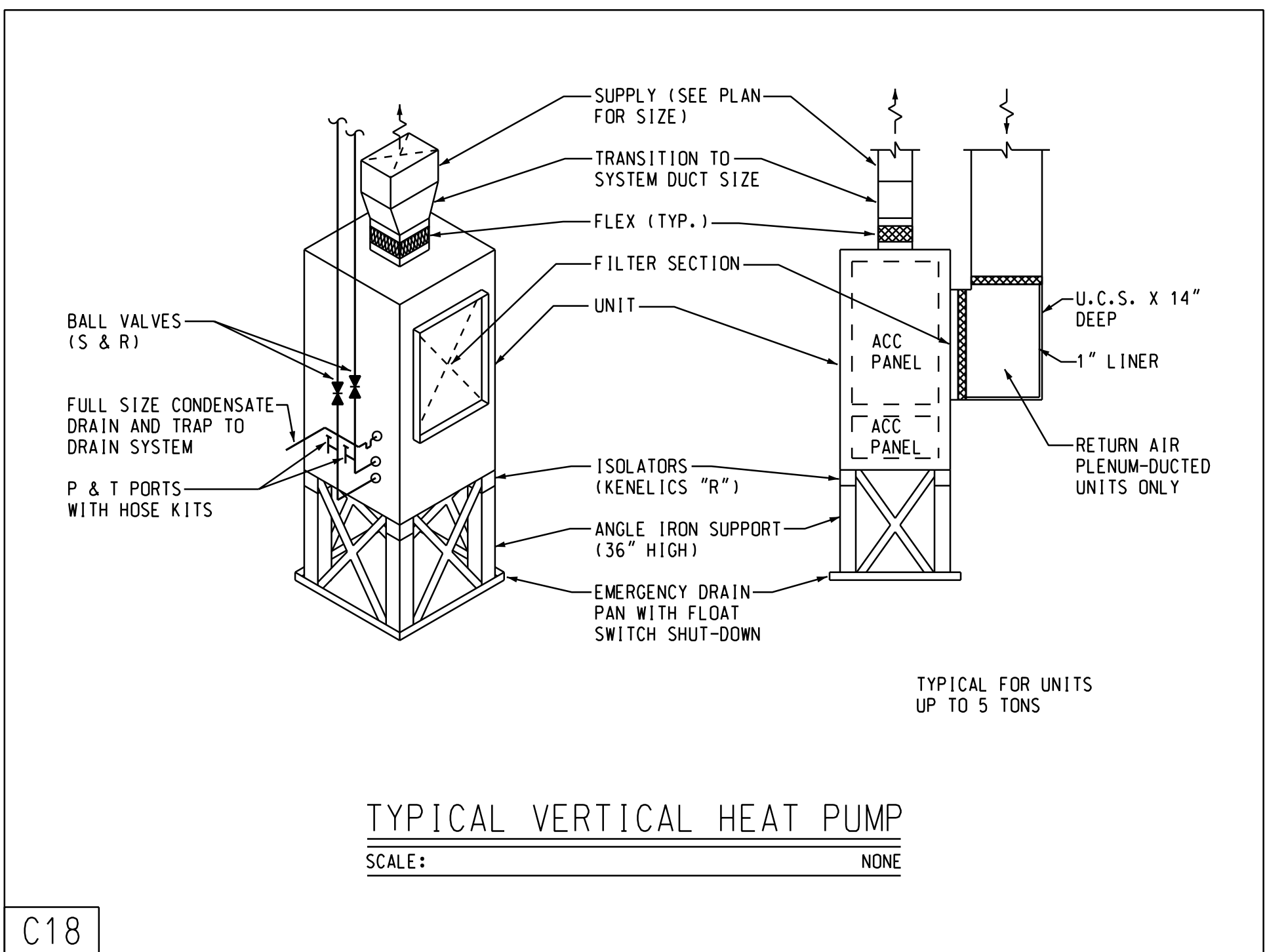
B8



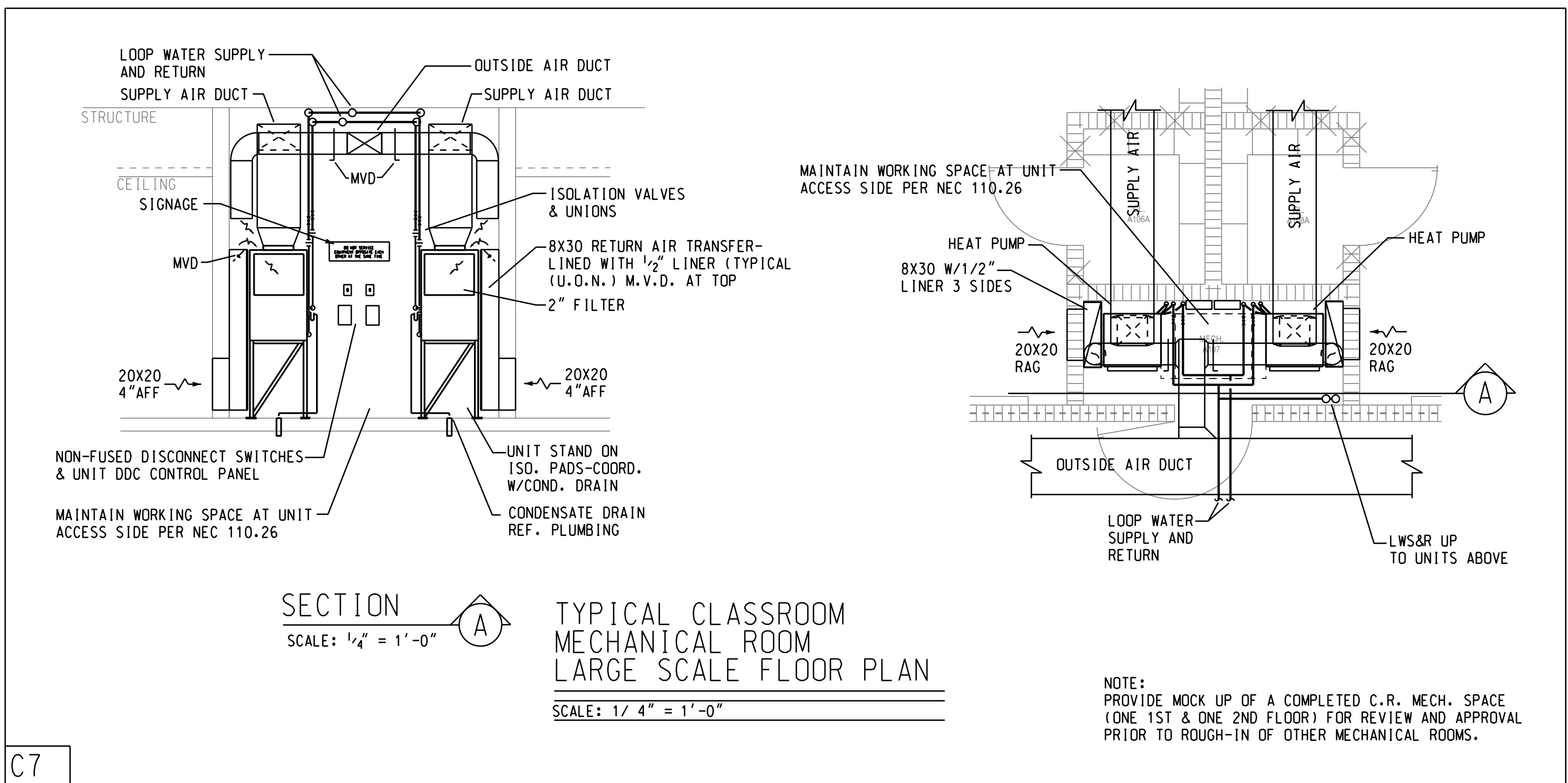
A6



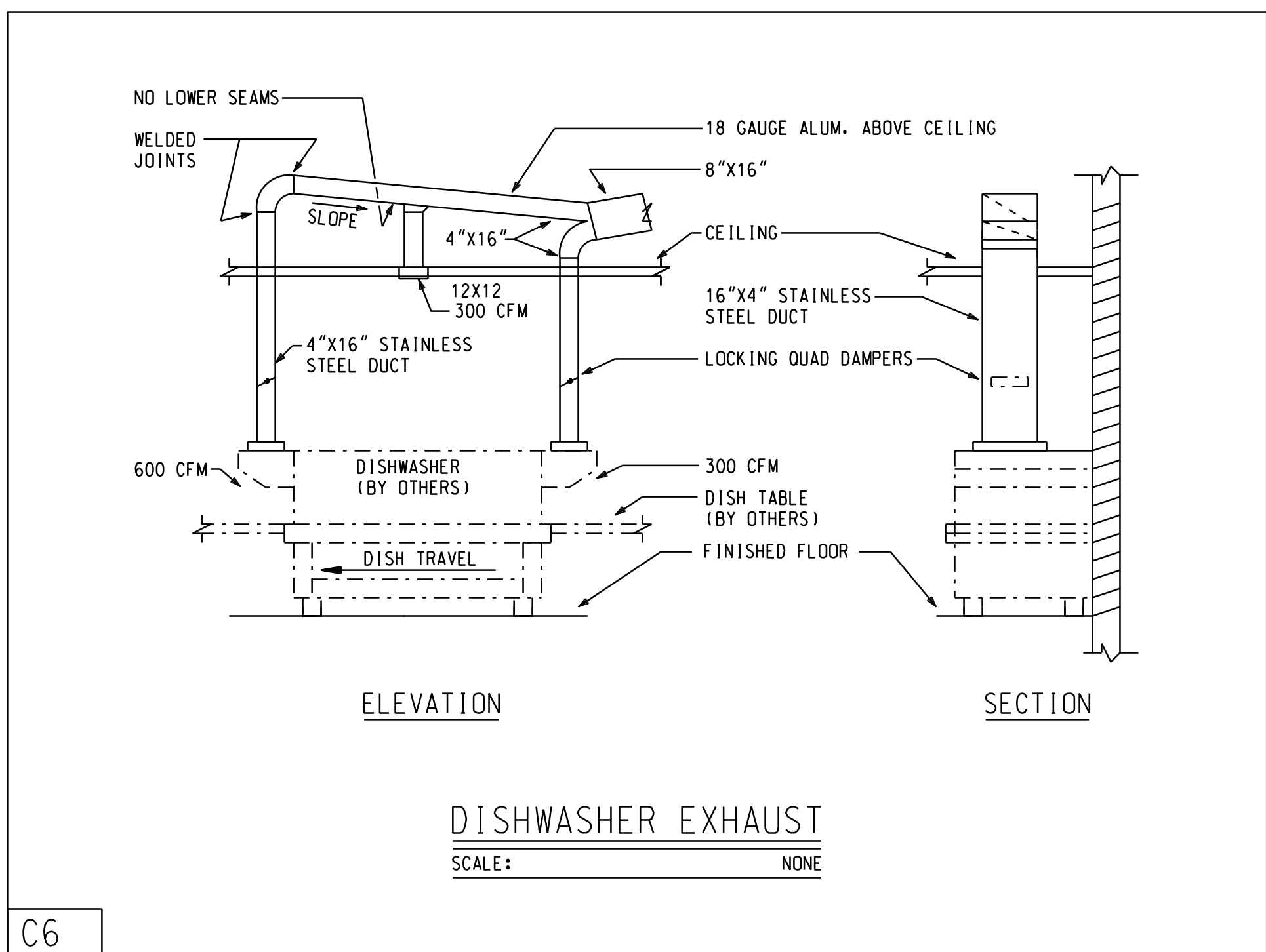
C16



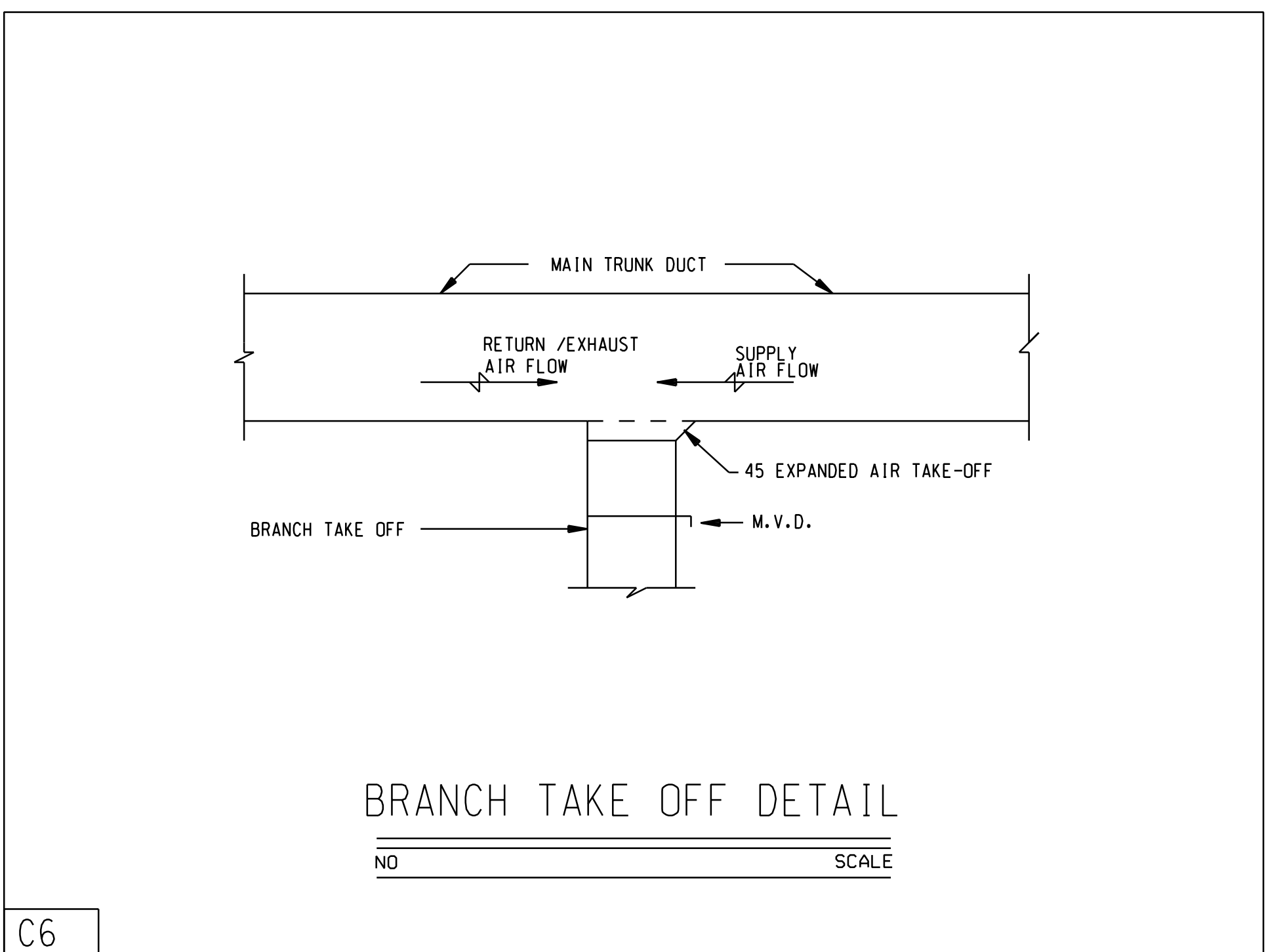
C18



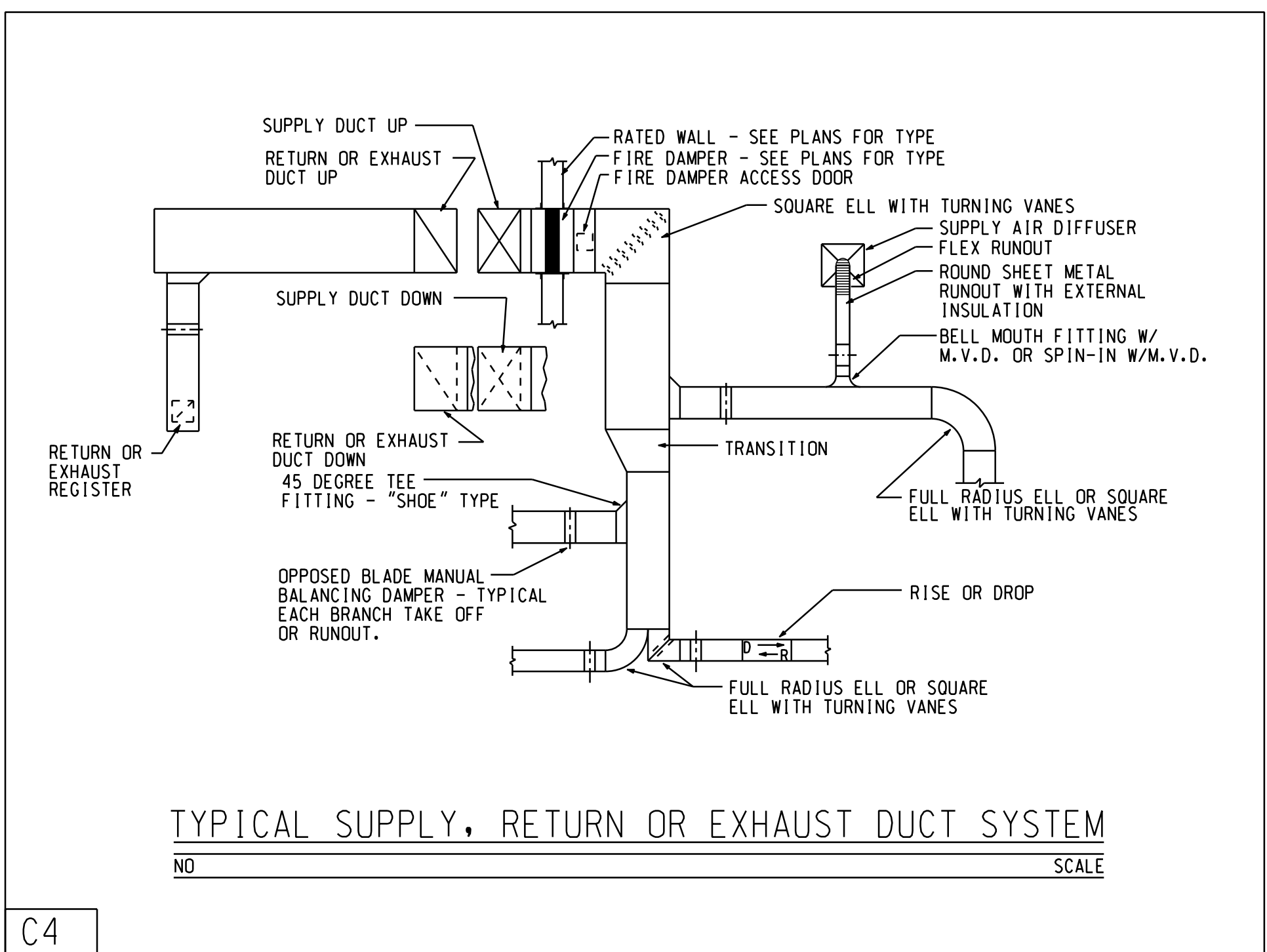
C7



C6



C6



C4

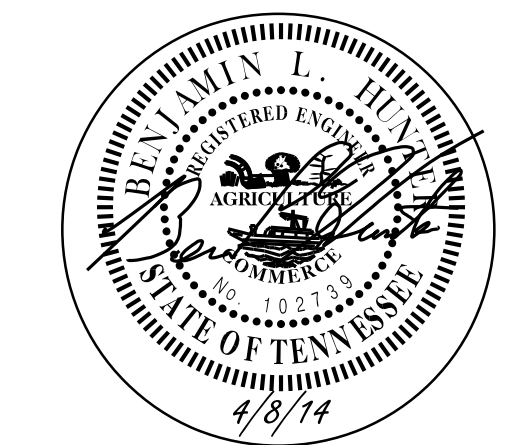
REVISION	DATE
----------	------

[illegible]

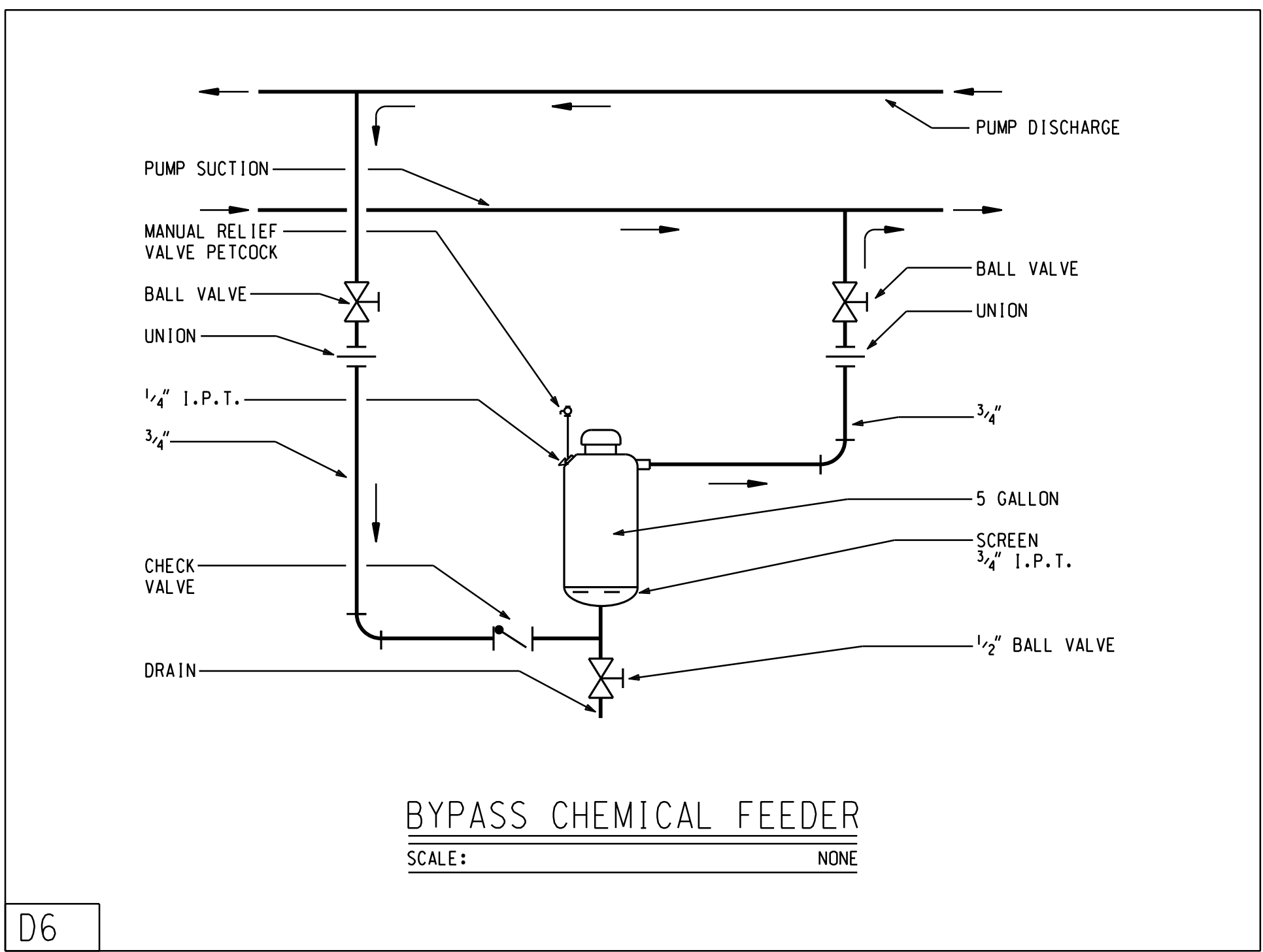
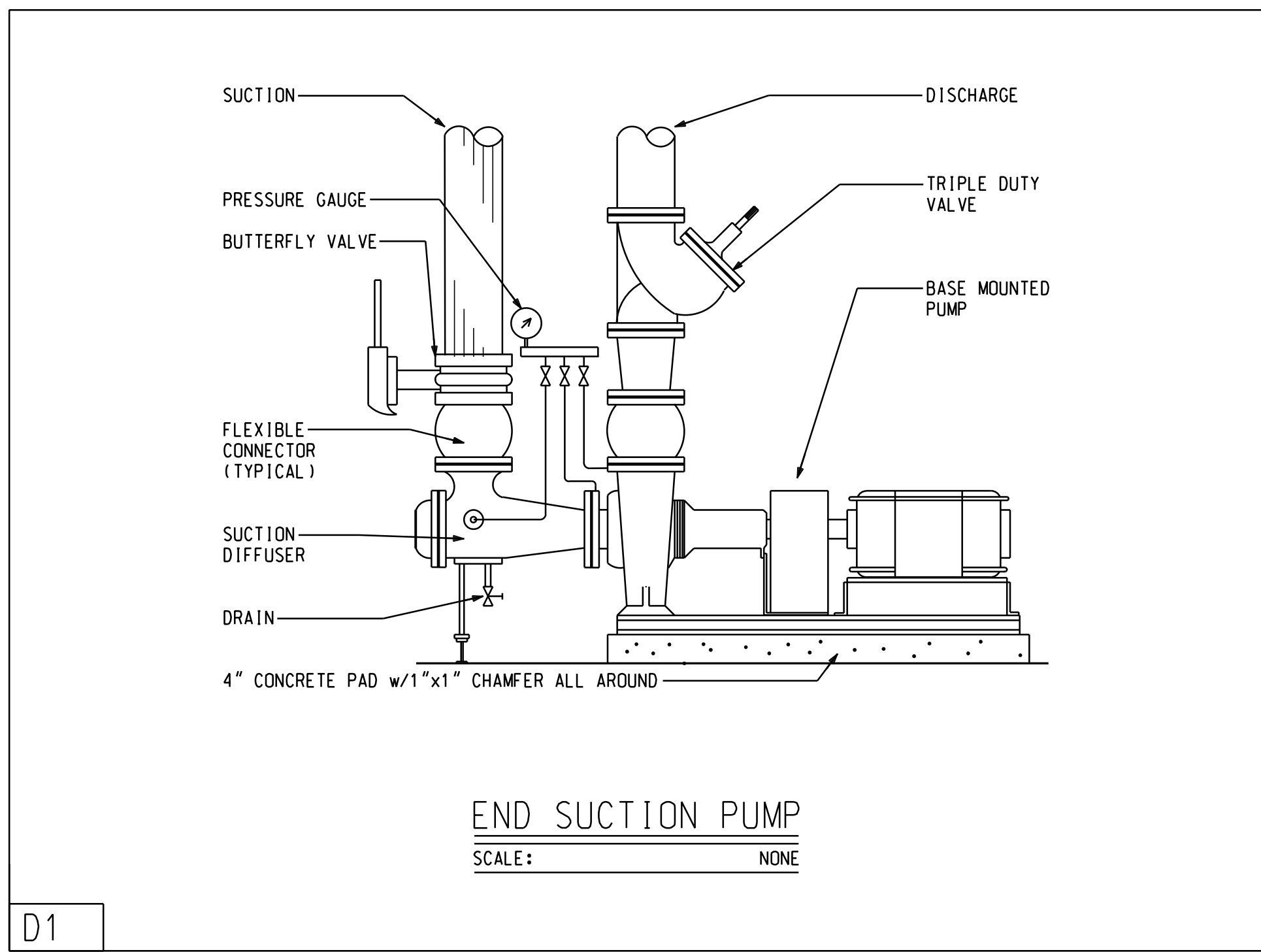
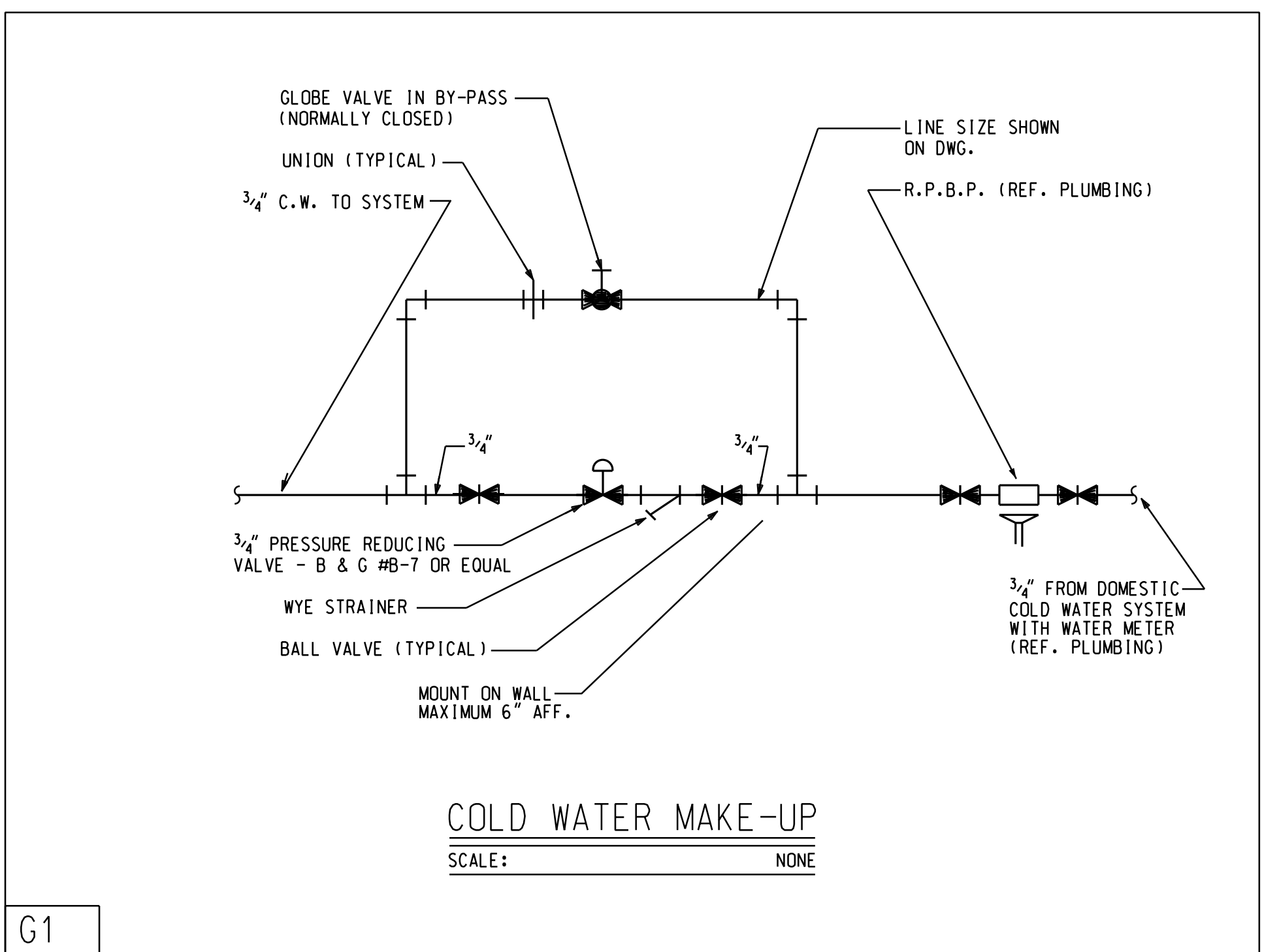
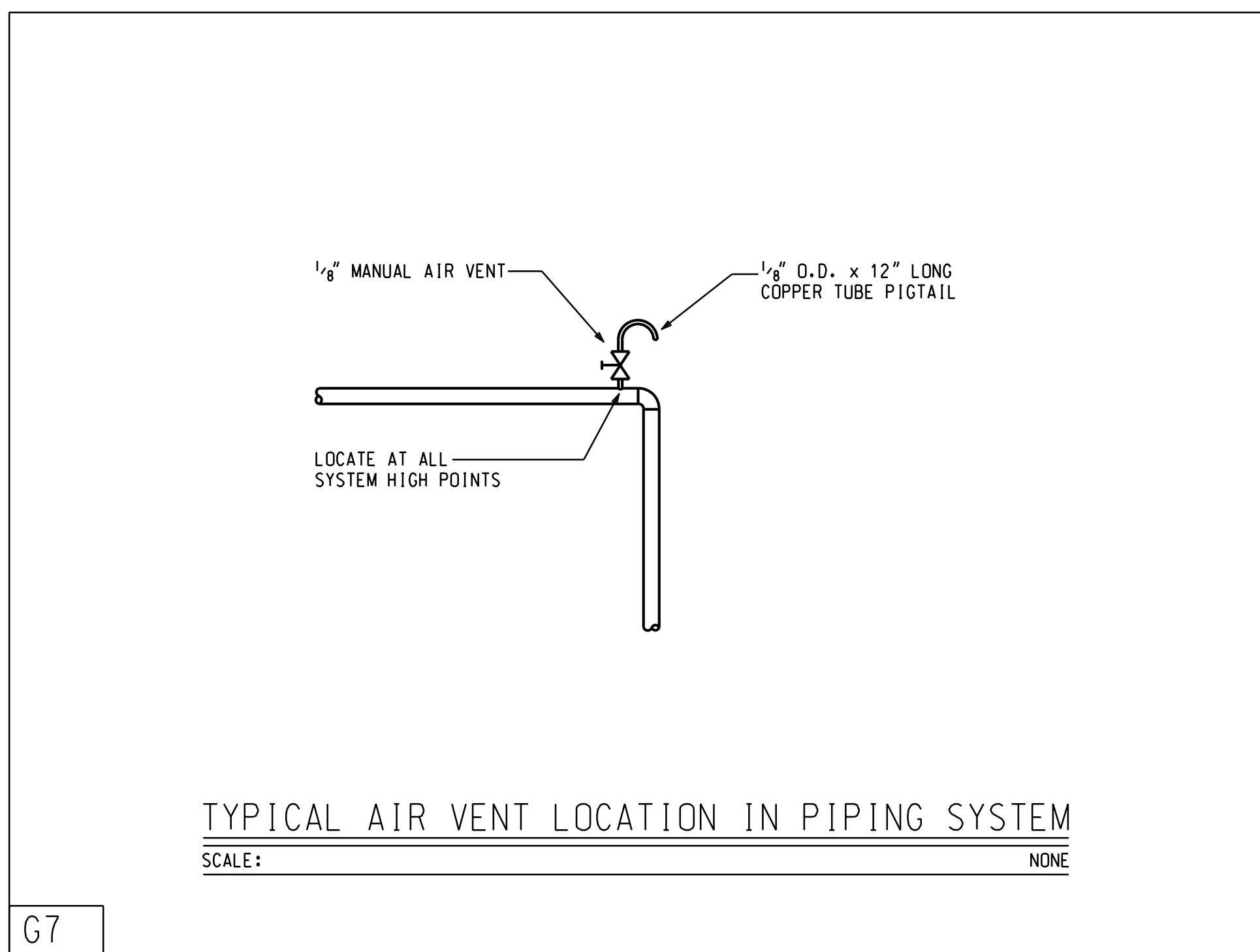
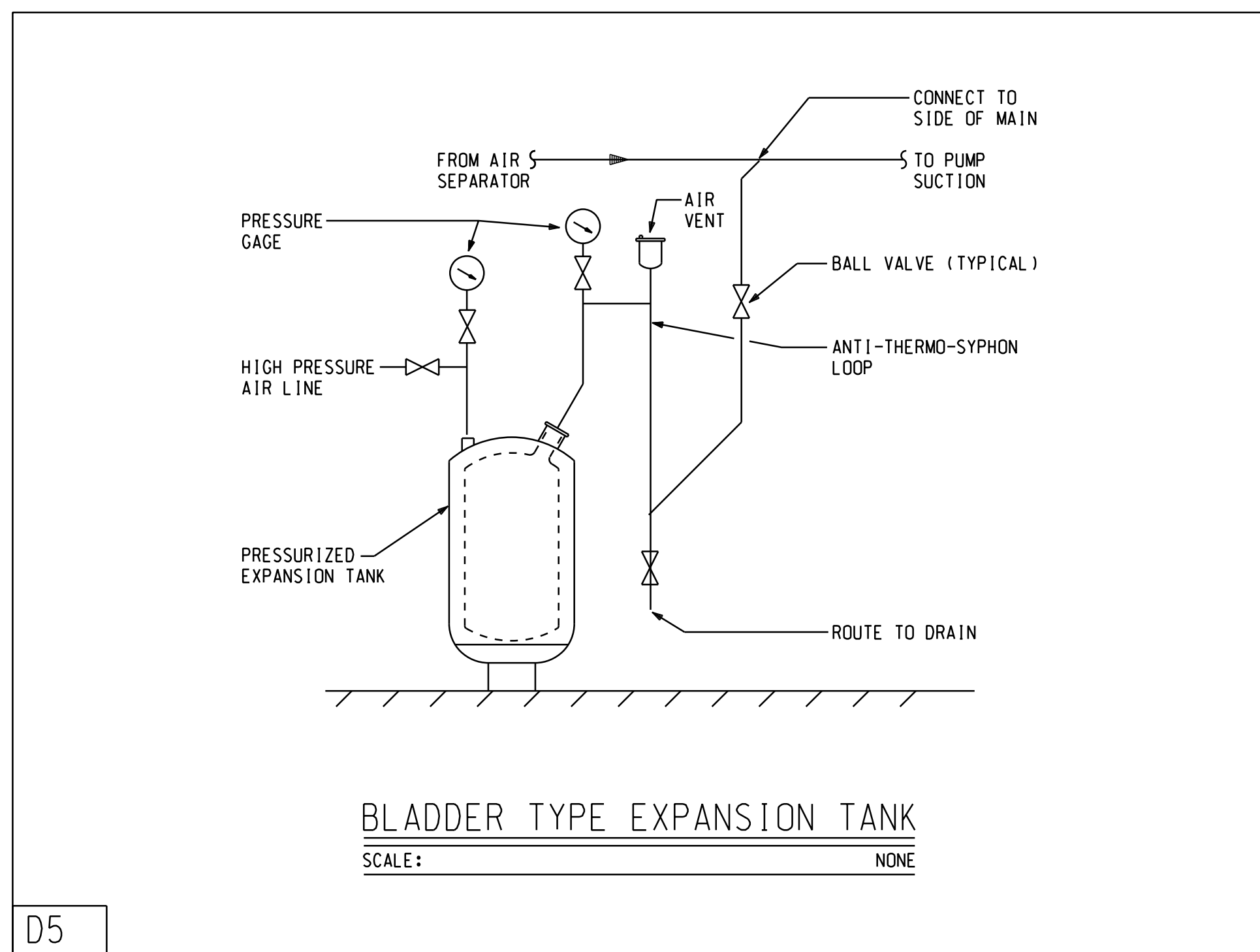
NOTES:

[illegible]

THIS DRAWING SHALL NOT BE  
REPRODUCED, PUBLISHED, OR USED  
IN ANY WAY WITHOUT THE WRITTEN  
PERMISSION OF THE ARCHITECT.



PROJECT NO.	1311
DATE	04-08-14
DRAWN BY	E.E.I.
CHECKED BY	E.E.I.

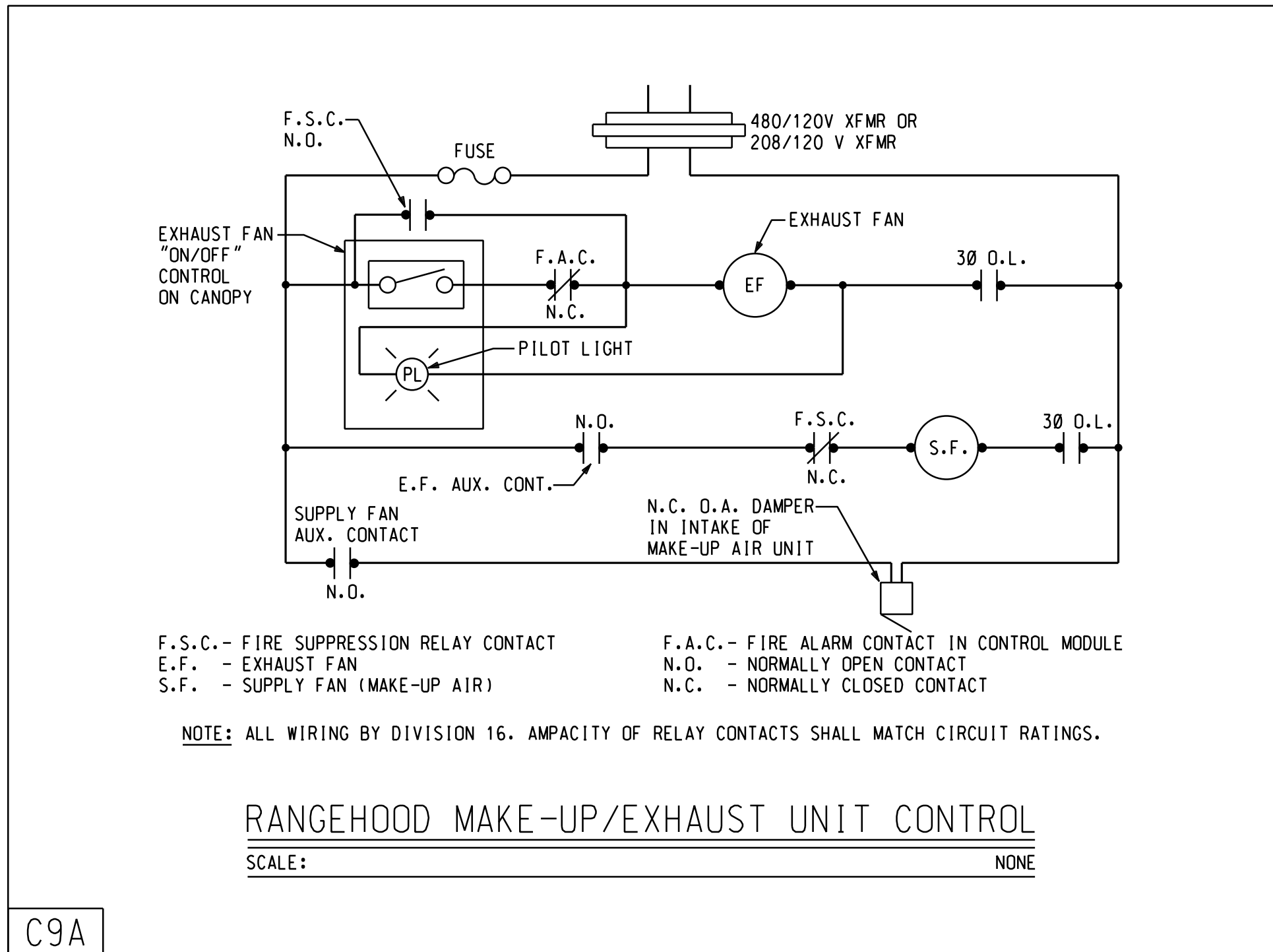




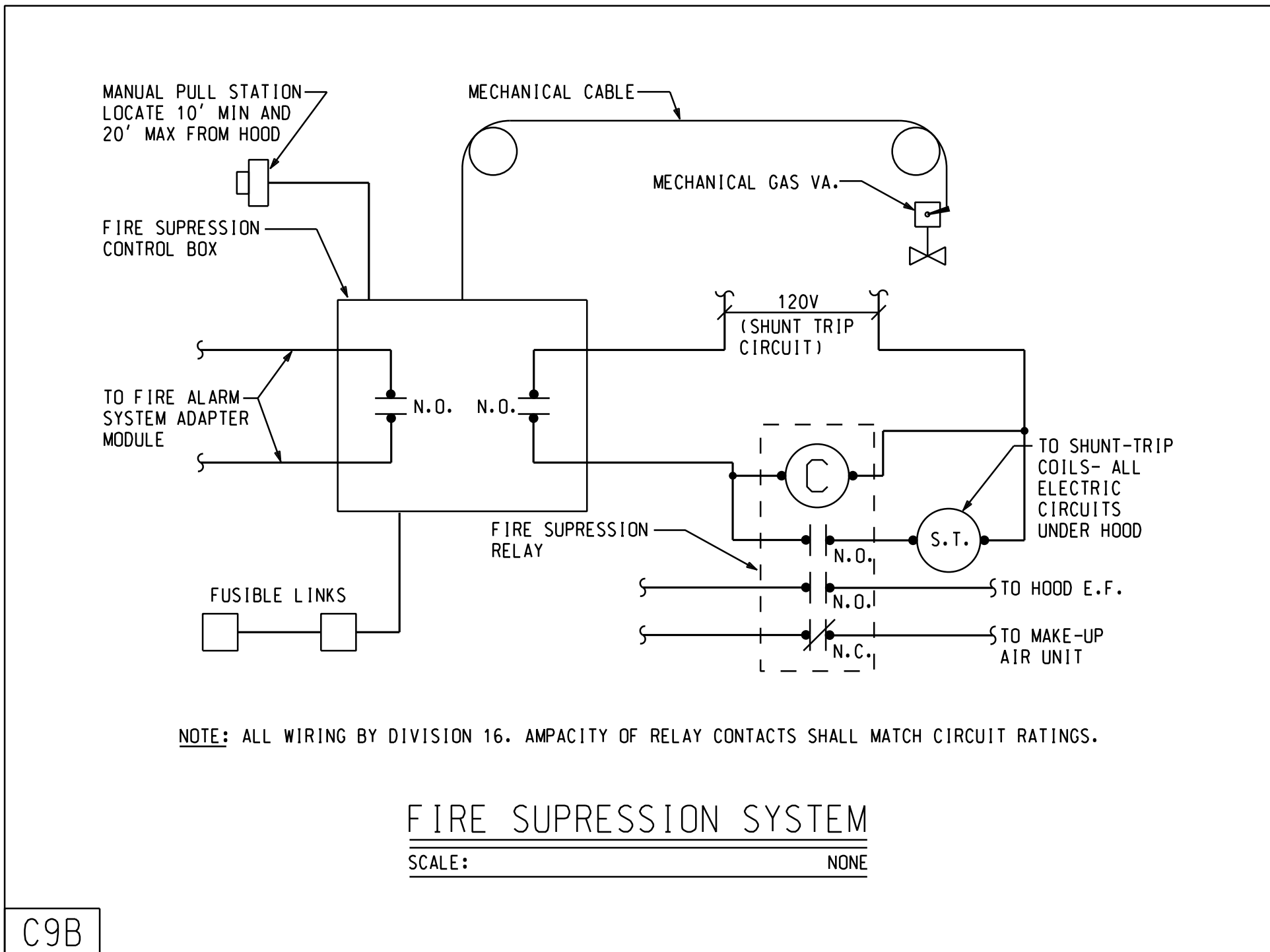




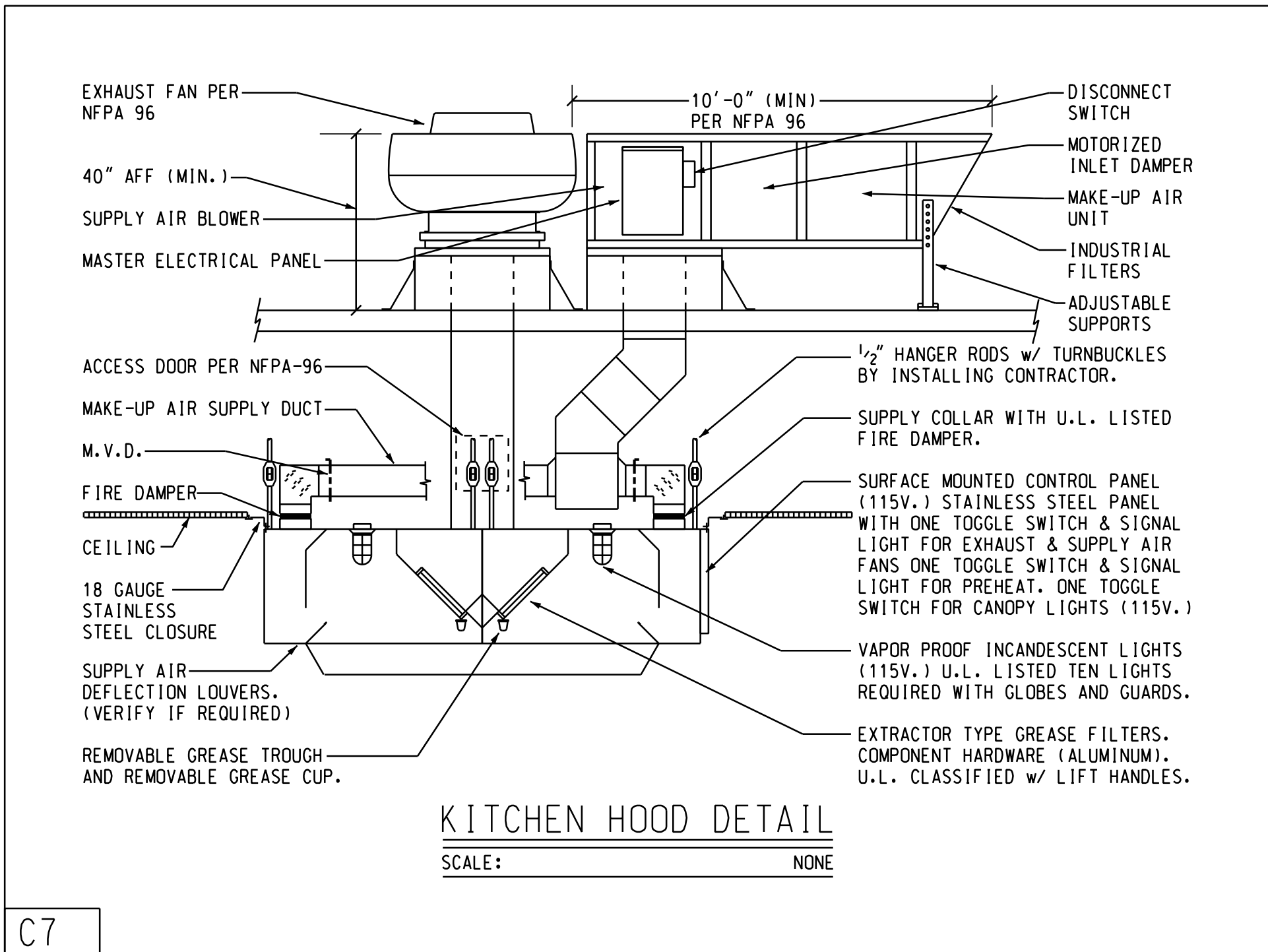
C:\1326A\1326-m50.004.dgn  
4/8/2014  
3:46:07 PM



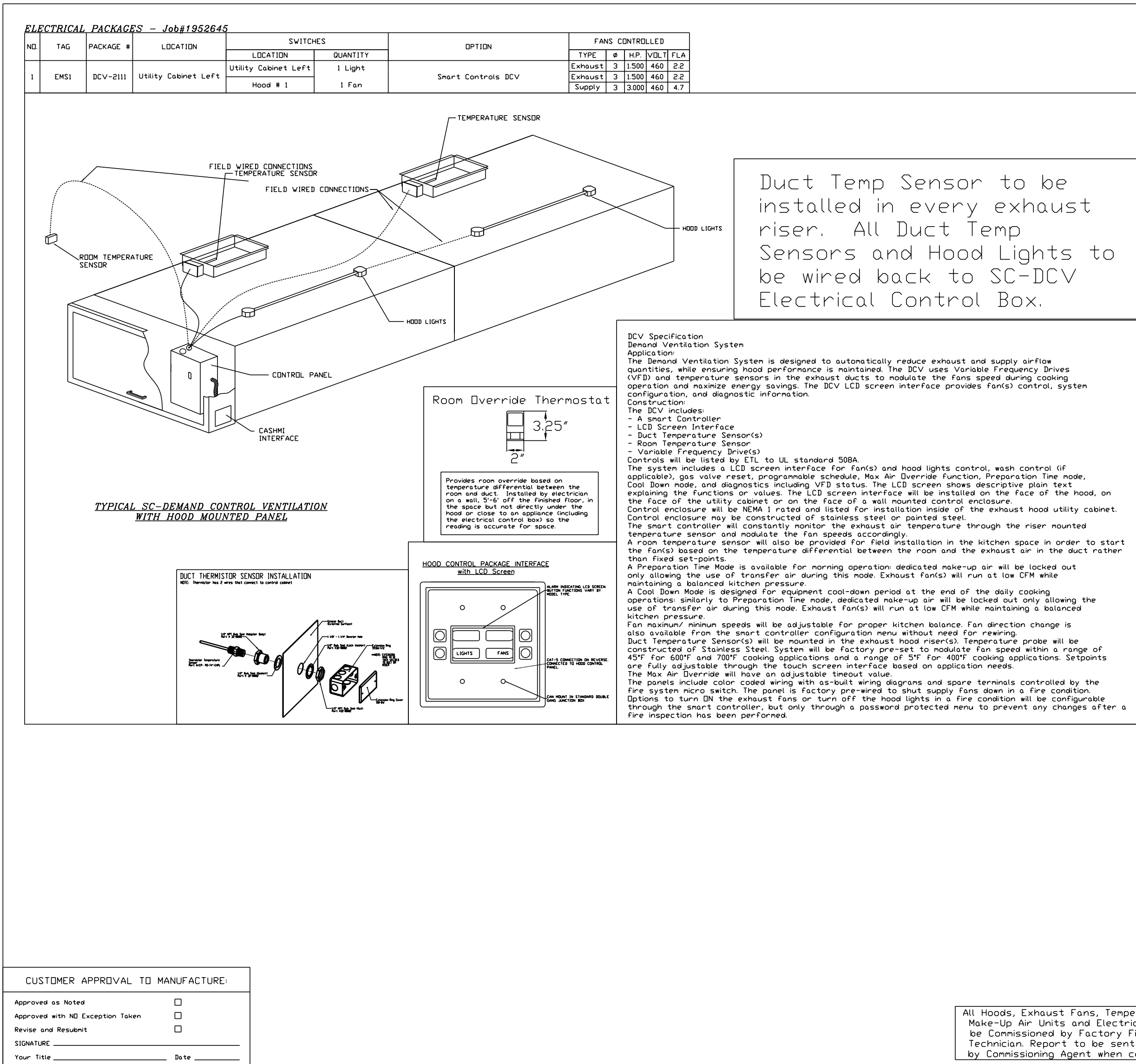
C9A



C9B



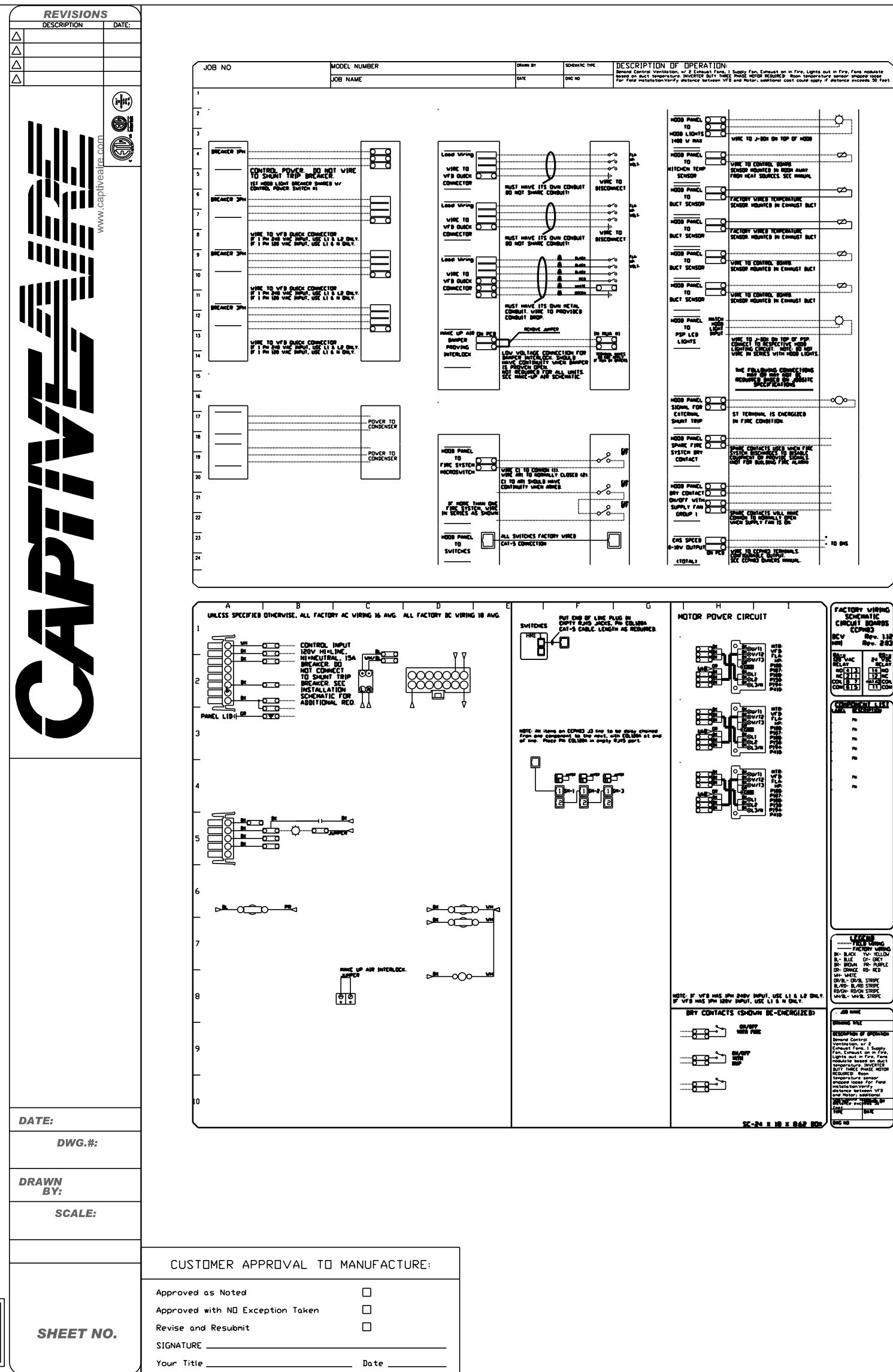
C7



CUSTOMER APPROVAL TO MANUFACTURE:  
Approved as Noted  
Approved with NO Exception Taken  
Revised and Reapproved  
Signature  
Your Title Date

All Hoods, Exhaust Fans, Tempered/Untempered Make-up Air Units and Electrical Packages to be Commissioned by Factory Field Service Technician Report to be sent to Engineer by Commissioning Agent when complete.

FOR QUESTIONS, CALL THE  
NASHVILLE REGIONAL OFFICE:  
129 HOLLYHURST DRIVE, SUITE 100, NASHVILLE, TN 37047  
PHONE: (615) 599-8300  
FAX: (615) 597-5560



DATE:  
DWG. BY:  
DRAWN BY:  
SCALE:

SHEET NO.

CUSTOMER APPROVAL TO MANUFACTURE:  
Approved as Noted  
Approved with NO Exception Taken  
Revised and Reapproved  
Signature  
Your Title Date

All Hoods, Exhaust Fans, Tempered/Untempered Make-up Air Units and Electrical Packages to be Commissioned by Factory Field Service Technician Report to be sent to Engineer by Commissioning Agent when complete.

FOR QUESTIONS, CALL THE  
NASHVILLE REGIONAL OFFICE:  
129 HOLLYHURST DRIVE, SUITE 100, NASHVILLE, TN 37047  
PHONE: (615) 599-8300  
FAX: (615) 597-5560

NOTE:  
THE DRAWINGS ON THIS SHEET WERE PREPARED BY CAPTIVE AIRE  
AND INCLUDED AS A REQUIREMENT OF THE TN STATE FIRE  
MARSHALL'S OFFICE.

C:\1326\1326.m50.005.dgn  
4/8/2014 PM  
3:46:24 PM

City Center  
100 East Vine St.  
Murfreesboro Tennessee  
37130  
615-890-4560  
Fax: 615-890-4564

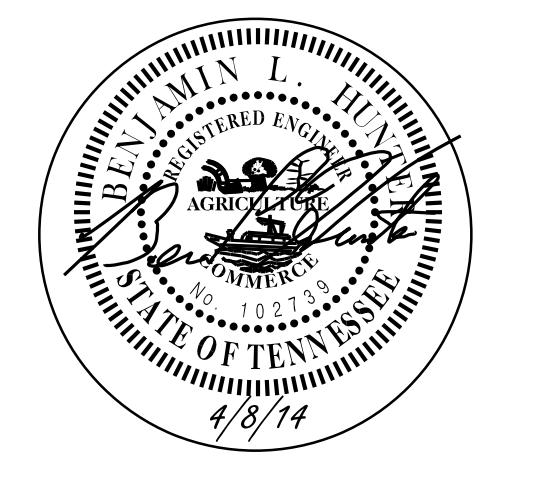
Chapel  
Hill  
Intermediate  
School

425 South Horton Parkway  
Chapel Hill, Tennessee

REVISION DATE

NOTES:

THIS DRAWING SHALL NOT BE  
REPRODUCED, PUBLISHED, OR USED  
IN ANY WAY WITHOUT THE WRITTEN  
PERMISSION OF THE ARCHITECT.



PROJECT NO. 1311  
DATE 04-08-14  
DRAWN BY E.E.I.  
CHECKED BY E.E.I.

M4.5

NOTE:  
THE DRAWINGS ON THIS SHEET WERE PREPARED BY CAPTIVE AIRE  
AND INCLUDED AS A REQUIREMENT OF THE TN STATE FIRE  
MARSHALL'S OFFICE.

REVISIONS

NO.	DESCRIPTION	DATE
1	ISSUED FOR PERMIT	04/08/14
2	REVISED FOR FIELD INSTALLATION	04/08/14
3	REVISED FOR FIELD INSTALLATION	04/08/14
4	REVISED FOR FIELD INSTALLATION	04/08/14
5	REVISED FOR FIELD INSTALLATION	04/08/14

SECTION VIEW - MODEL 6624ND-2-ACSPSP-F  
HOODS - 8" (HT) #2 (H2)

IF IT IS THE RESPONSIBILITY  
OF THE USER TO VERIFY THAT THE HOOD IS  
PROPERLY INSTALLED AND OPERATING  
WITHIN THE SPECIFICATIONS OF THE  
MANUFACTURER, THE USER SHALL  
BE RESPONSIBLE FOR THE  
HOOD'S PROPER OPERATION.

CAPTIVE-AIRE HOODS ARE  
BUILT IN COMPLIANCE WITH

NFPA #96  
UL STANDARD #1646  
INT. MECH. CODE (IMC)

CUSTOMER APPROVAL TO MANUFACTURE:

Approved as Noted

Approved with NO Exception Taken

Revised and Resubmit

Signature

Date

DATE

DWG. R:

DRAWN BY:

SCALE:

SHEET NO.

REVISIONS

NO.	DESCRIPTION	DATE
1	ISSUED FOR PERMIT	04/08/14
2	REVISED FOR FIELD INSTALLATION	04/08/14
3	REVISED FOR FIELD INSTALLATION	04/08/14
4	REVISED FOR FIELD INSTALLATION	04/08/14
5	REVISED FOR FIELD INSTALLATION	04/08/14

EXHAUST FAN INFORMATION - J0411852645

FAN UNIT NO.	FAN UNIT MODEL #	CFM	ESP.	BPM	H.P.	#	VOLT.	FLA	WEIGHT (LBS.) DIMS.
1	EF-1	NCASAPHA	2660	1.250	1300	3	480	2.2	154 14.1
2	EF-2	NCASAPHA	2660	1.250	1300	3	480	2.2	154 14.1

CUSTOMER APPROVAL TO MANUFACTURE:

Approved as Noted

Approved with NO Exception Taken

Revised and Resubmit

Signature

Date

DATE

DWG. R:

DRAWN BY:

SCALE:

SHEET NO.

REVISIONS

NO.	DESCRIPTION	DATE
1	ISSUED FOR PERMIT	04/08/14
2	REVISED FOR FIELD INSTALLATION	04/08/14
3	REVISED FOR FIELD INSTALLATION	04/08/14
4	REVISED FOR FIELD INSTALLATION	04/08/14
5	REVISED FOR FIELD INSTALLATION	04/08/14

PLAN VIEW - Hood #2 (H2)

IF IT IS THE RESPONSIBILITY  
OF THE USER TO VERIFY THAT THE HOOD IS  
PROPERLY INSTALLED AND OPERATING  
WITHIN THE SPECIFICATIONS OF THE  
MANUFACTURER, THE USER SHALL  
BE RESPONSIBLE FOR THE  
HOOD'S PROPER OPERATION.

CAPTIVE-AIRE HOODS ARE  
BUILT IN COMPLIANCE WITH

NFPA #96  
UL STANDARD #1646  
INT. MECH. CODE (IMC)

CUSTOMER APPROVAL TO MANUFACTURE:

Approved as Noted

Approved with NO Exception Taken

Revised and Resubmit

Signature

Date

DATE

DWG. R:

DRAWN BY:

SCALE:

SHEET NO.

REVISIONS

NO.	DESCRIPTION	DATE
1	ISSUED FOR PERMIT	04/08/14
2	REVISED FOR FIELD INSTALLATION	04/08/14
3	REVISED FOR FIELD INSTALLATION	04/08/14
4	REVISED FOR FIELD INSTALLATION	04/08/14
5	REVISED FOR FIELD INSTALLATION	04/08/14

PLAN VIEW - Hood #1 (H1)

IF IT IS THE RESPONSIBILITY  
OF THE USER TO VERIFY THAT THE HOOD IS  
PROPERLY INSTALLED AND OPERATING  
WITHIN THE SPECIFICATIONS OF THE  
MANUFACTURER, THE USER SHALL  
BE RESPONSIBLE FOR THE  
HOOD'S PROPER OPERATION.

CAPTIVE-AIRE HOODS ARE  
BUILT IN COMPLIANCE WITH

NFPA #96  
UL STANDARD #1646  
INT. MECH. CODE (IMC)

CUSTOMER APPROVAL TO MANUFACTURE:

Approved as Noted

Approved with NO Exception Taken

Revised and Resubmit

Signature

Date

DATE

DWG. R:

DRAWN BY:

SCALE:

SHEET NO.

NOTE:  
THE DRAWINGS ON THIS SHEET WERE PREPARED BY CAPTIVE AIRE  
AND INCLUDED AS A REQUIREMENT OF THE TN STATE FIRE  
MARSHALL'S OFFICE.



## CENTRAL WATER LOOP PIPING AND CONTROL SCHEMATIC



C:\1326A\1326A.m70.002.dgn  
4/8/2014  
3:49:26 PM

rsouthhill  
80 : / in.

